BULLETIN

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AN APPROACH TO MADRAS METROPOLITAN DEVELOPMENT

GRADUATING FUTURES

NINTH INTERDISCIPLINARY RESEARCH METHODOLOGY WORKSHOP : STATEMENT OF THE WORKSHOP

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MONTHLY BULLETIN

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EDITORIAL-SOME HIGHLIGHTS

I General Economic Scene

State

Weather and Cyclone

In the midst of a hot and sweltering May, a cyclone developed at the end of the first week of May in the Bay and crossed the Andhra Pradesh coast in the Nellore, Prakasam and Guntur districts, with a fallout in Tamil Nadu particularly in Madras city and Chingleput district. An incomplete and first tentative assessment of the damage shows 225 people killed in Andhra and 9 in Chingleput district. (The loss of lives was kept down compared to the November 1977 cyclone [see Vol. VIII, p.2] because the population in the coastal area was evacuated before the cyclone crossed the coast) In Andhra Pradesh 4. 50 lakh houses were damaged, betel leaf, tobacco and paddy crops lost over a wide area. The total damage is yet to be assessed but is estimated at Rs. 300-500 crores. Railways, road and telecommunications and all power installations in the 3 Andhra districts have been destroyed to the point where no railway traffic in the area (Guntur to Vijayawada) is possible to the end of the month. The Union and State governments have moved rapidly to provide housing, food, clothing and medical relief to the afflicted. In Tamil Nadu, apart from the loss of lives, huts and crops in Chingleput district, roads have been damaged and over 1 lakh salt bags lost. Relief for those affected is being rapidly provided.

Power

During May the power supply in the state was similar to that in April, with the 15 per cent cut on HT consumers. The government is of the view that this cut will continue till July when the effect of the southwest monsoon will be known. During May the state continued the purchase of Kerala power (of 5. 8 million units) at the higher price of 18 paise per unit. The state faces a long term problem with the demand for power increasing currently at the rate of 17 per cent per annum and even if it is mobilised at 10 per cent in the future, with power supply increases forecast at a maximum 5-6 per cent, there will be continued shortfall. In the meanwhile the time lag faced by

the *Tuticorin* plant needs immediate corrective attention *and negotiations* with Karnataka on Hogenakal should be brought to an early positive conclusion. The government announced in May the setting up in the State Electricity Board of a tariff revision cell to undertake an indepth study of the cost structure of each segment of industry, its operational problems and the capacity to pay the power tariff. This will correct the past and present ad hoc system of revising the rates and making them to apply to all types of industries. A first increase in power rates was announced in early May, which was deliberately kept down in order not to slow down industrial revival in the state. The Tamil Nadu State Electricity Board, it is forecast, will be closing the year 1978-79 with a deficit of Rs. 48 crores, so that the Rs. 15 crores revenue from the increased rates will cover less than 30 per cent of the deficit. The development of a new power tariff pattern for which the Administrative Staff College, Hyderabad has been commissioned is a further effort to rationalise power costs and prices. The study will take into account the latest cost aspects of the Board and the farmers' demand for a reduction in the agricultural power tariff. Also the Consultative Committee of the Board has proposed setting up of consumer advisory panels at the system level to discuss and solve the problems of the consumer at the district or system level A technical examiners cell at the Board level is also being set up to examine the correctness of estimates of projects and major works and changes in project costs.

For the country as a whole, power shortage in May increased The worst affected state continues to be West Bengal where severe power rationing has hit all industries; there is wide spread power cut in the morning, and in the middle of the month a near disaster with five units the of State Electricity Board breaking down. In Maharashtra the power cut on industries was increased in May from 15 per cent to 35 per cent due to inadequate coal supplies to the thermal stations. This is in addition to the existing 20 per cent cut, so that general industries had a 55 per cent energy cut and 60 per cent in their demand for more power, continuous process industries also have a 55 per cent cut and 55 per cent on their additional demand and textiles a 50 per cent cut and a 50 per cent cut on their additional power demand. In Bihar due mainly to poor maintenance against the installed capacity of 700 MW, power generation in May fell to 200 MW resulting in frequent off loading. Karnataka continued its power cut from April as did Uttar Pradesh, Haryana, Madhya Pradesh and Rajasthan. Due to coal shortage, Gujarat imposed in May a 16 per cent power cut. This general shortage of power throughout the country (except in Kerala, Orissa and Andhra Pradesh in normal times) is due to lack of proper maintenance leading to breakdown of plants, inadequate and sometimes poor quality of coal and poor leadership of the State Electricity Boards. Due to, cyclone the Andhra Pradesh State Electricity Board sustained a loss of Rs.6 crores in the Nellore, Prakasam and Guntur districts. Electricity supply which was disrupted completely for 4 days was gradually restored by the end of the month.

Water

The Mettur Reservoir has a good storage of water (84.38 ft. against the full 120 ft.) and so it is planned to let out water from Mettur by mid-June this year. The Government has also extended the supply of Periyar water to 20,000 acres in Ramanathapuram district in addition to the 6,000 acres irrigated from this source. The masonry portion of Siruveni dam which will stabilise water supply to Coimbatore town is expected to be com-

pleted by mid June by the Kerala government. The masonry work involves the level being raised at the right and left ends and at the centre so that the storage during the monsoon will be enough to provide Coimbatore with water throughout the year The Kerala government is finding it difficult to find the 1,500 workers needed for this construction and here the Tamil Nadu government can be of help. The Committee set up by the state government to recommend measures for making Kotturpuram less flood prone during the monsoons submitted its report to the government in May. The government must decide on the recommendations now to save Kotturpuram during the coming monsoon. During the May cyclone, Srinivasapuram and Kasimedu Kuppam had to be evacuated and alternative tenements are being constructed for people living in these areas which are open to erosion from high tidal action.

Transport

Due to coal shortage which in part was due to the damage to railway line by the cyclone, in May 163 passenger trains were cancelled. Also due to the dislocation of train services due to cyclone, 4,000 mail bags destined to the Northern area piled up in Madras Central Station. Similar postal accumulations are reported from other centres in the state. Also due to dislocation in air services (loss of 3 air craft, grounding of others and the go slow move) air mail has also been accumulating in Madras and other centres in May. As part of the year's Rs. 5.5 crores road improvement programme, Rs. 50 lakhs was allotted to Madras city corporation to repair the road damages caused by the cyclone. Other Madras Metropolitan Development Authority programmes include 4,000 additional street lights, precast water drains on either side of the roads, the Rs. 85 lakhs compost manufacturing plan at Korokkupet turning out 150 tonnes per day, the growing demand for 1,200 tonnes of organic manure produced from the city's garbage and the planting of 25,000 more trees. MMDA is seeking Rs. 30 crores from the World Bank for its road laying scheme. On May 17 and 18, the Transport Ministers of Southern States met in Ootacamund and decided : a) to end corruption in transport departments by computerising motor vehicle registration records and driving license records both for transport and private vehicles and to establish separate tie lines between the computers of the state for the exchange of information, b) to introduce the traffic ticketing system for compounding minor offences and establishment of a schedule of rates for paying off the compounding of offences, c) to fix autodippers to reduce accidents and education of drivers and the public in traffic rules and regulations, d) to increase composite permits for lorry transport from 600 to 1,000 in the South and to request the Union government to increase national permits for Tamil Nadu, Karnataka and Kerala from 400 to 600 and for Andhra Pradesh from 450 to 600 and e) to set up a sub committee of transport commissioners to suggest ways of checking noise and air pollution caused by motor vehicles.

Aerial Photo Survey

The Aerial Photo Survey of the urban areas of Madurai, Tiruchirapalli, Coimbatore and Salem has been completed by the National Remote Sensing Agency for the state government's Town Planning Directorate at a cost of Rs. 5.5 lakhs. The Agency had also completed a multi spectral scanning for settling down various urban characteristics and is training the engineers in the Town Planning Departments in photo interpretation methods. Also the photographs of the land mass at

low altitudes are being used for preparing cadastral maps. Further a quarter of the area of the state is being surveyed, using Landsat Satellite Imagery for ground water studies at the request of the Tamil Nadu State Ground Water Department.

Farmers Concession and Milk Supply

Five farmers' associations in the state have been agitating for over a year for various concessions (see vol VIII, p 450). At the end of May, the state goverment on the basis of the recommendations of a high power committee which studied the problems of the farmers, announced a package of concessions, at a total cost to the state exchequer of Rs 40 crores: a) the state government will urge on the Union government a higher procurement price for paddy on par with wheat and will take certain steps to ensure a remunerative price for small farmers, b) the 20 per cent levy on the movement of paddy outside the state is to be abolished, c) the agricultural credit input loans granted to landless agriculturalists will be fully written off and for the others the first Rs. 500 and half of the next Rs. 5,000 will be written off, d) loans given under the Agricultural Loans Act and the Land Improvement Act will be written off if the repayments to date on interest or principal or both equal the loan amount. This will apply also to commercial crop loans, e) the loans granted for tube wells and open wells under the Capital Improvement Loans will be written off if the repayments of principal, interest or both are equal to twice the amount of the loan. On loan for wells, they will be written off upto Rs. 10 000 where the well has failed. In regard to Agricultural Department loans further collections will be waived except for soil conservation loans which will be settled at 50 per cent and ground spraying loans to be settled at the amount of the loan, f) penal interest upto June 30, 1979 on all short, medium and long cooperative agricultural loans will be waived and anypenal interest paid after June 30, 1977 will be credited to the account of the loanee and extension of time will be granted for repayment of converted cooperative loans — (those concessions will not be available to any assessee under the general Sales Tax, Income Tax or Agricultural Income Tax), g) interest rates of 12.5 to 13.8 per cent will be reduced to 10.5 per cent for small farmers and 12 per cent for others, and h) the other recommendations are under study and will be implemented after the study is completed. Under these concessions 15 lakh farmers will get a relief of Rs 13 crores under Takkavi loans and 16 lakh farmers of Rs. 27 crores in cooperative loans. As a result of the cyclone and the power failure, the Madhavaram central dairy could not function on May 12 and 13 and milk supply in the city was disrupted, during which period milk was made available to consumers from the bulk lending units.

National

VI Plan

A first assessment of the performance of the first year of the VI plan, 1978-79, by the Planning Commission is that the growth rate for that year is 3.9 per cent compared to the target of 4.7 per cent and the 1977-78 rate of 7.25 per cent. Agricultural growth is placed at 1.91 per cent (in 1977-78 it was 10.7 per cent). Plan expenditures for 1978-79 show a shortfall of Rs. 272 crores, (Rs. 5,392 crores spent against Rs. 5,664 crores allotted). Foodgrains are estimated at 127 million tonnes against the target of 126 million tonnes, oil seeds 94.33 lakh tonnes against 108

lakh tonnes target, sugarcane 181.63 million tonnes against the target of 166 million tonnes, cotton at 76 lakh bales against 75 lakh bales target, jute at 81 lakh bales against 76 lakh bales target, coal at 102 million tonnes against 113 5 million tonnes target, crude 11.7 million tonnes against 12.8 million tonnes target, iron ore 37 million tonnes against 39 million tonnes target, sugar at 6 5 million tonnes against 5.5 million tonnes target, vanaspathi at 6.5 lakh tonnes against 6 lakh tonnes target, cotton yarn 1,140 million kg. which was also the target, cotton cloth 4,200 million metres which was also the target, fertilisers (M) 21.1 lakh tonnes against 22.5 lakh tonnes target, cement 24.13 million tonnes against 24.94 million tonnes target, steel 7.9 million tonnes against 7.68 million tonnes target, aluminium 2,13,000 tonnes against 2,00,000 tonnes target etc. Exports, as will be noted later, rose by 2.3 per cent to Rs. 5 500 crores against the target of Rs. 5,800 crores, while imports rose to Rs. 7,184 crores, involving a deficit of Rs. 1,684 crores. Foreign exchange reserves rose to Rs. 5,095 crores. The states have been asked to redouble their efforts to mobilise additional resources which must reach Rs. 4,000 crores in the VI Plan, even as Parliament transferred Rs. 23,063 crores for the Plan period as their share of the divisible pool as recommended by the Seventh Finance Commission (see vol. IX, pp 5-6). At the meeting of NDC at the end of May the Union government turned down the demand of some of the states for the inclusion of the corporation tax and the surcharge on the income tax in the divisible pool as it would not leave the Union government with resources to meet its responsibility for defence, security, development of backward areas and states and public investment. The Union government announced in May the appointment of a committee headed by Prof. V. M. Dandekar to enquire into the tax concession, particularly the corporation tax and central excise on the techniques of production used in industry and to make recommendations to encourage the adoption of labour intensive methods. The Union government reported in May that of 40,65,928 acres declared as surplus land, 15,34,391 acres were taken possession of and 10,70,564 acres distributed to 9,09,125 beneficiaries between April 1976 and March 1979.

Prices

The inflationary pressure continued in April, when the index number of wholesale prices registered a rise of 2.0 per cent for the month, standing at 194.3 at April 28, 1979. This means that in two months the price rise has been 6 per cent which at an annual rate of over 36 per cent is cause for alarm. Examining the April 28 index, primary articles moved up by 1.8 per cent mainly due to the rise in crude prices by 15 per cent, sugar rose by 6.5 per cent, jute textiles by 16.6 per cent, iron and steel by 14.4 per cent, oil seeds by 1.4 per cent, and in fact except for tobacco and fertilisers all items in the manufactured products group rose. The only other price fall in the month was mineral oil by—4.3 per cent. One of the sources of inflation was the continued increase in money supply. Reserve Bank of India reports that as at April 27 money supply (M_1) increased to Rs. 21,900 crores which was an increase of 17.2 per cent for the year, while (M_2) showed an increase of 19.6 per cent. Active notes which declined by Rs.69 crores in the week ending April 27 increased by Rs. 149 crores in the week ending May 4 and to Rs. 190.81 crores at Rs. 11,101,97 crores in the week ending May 11. The government announced that as at January 1979, the Rupee was down

to 24.75 paise as measured by the All India working class consumer price index with 1949 = 100. Further inflationary pressures include the price rises of wheat, cement, steel and petroleum announced by government, the rise of 20 per cent for sugar requested by ISMA, and the increase in wages and the grant of bonus to railway workers which will have to be followed by those of PTT, steel and other public sector undertakings, similar to the rise of wages granted to the coal mines. The government also reports that gold smuggling into the country has increased and stands at Rs. 250 crores a year. The Planning Commission in a paper to the Union Cabinet refers to the 6 per cent price rise in 2 months and the possibility of an overall 10 per cent rise by the end of the current financial year proposes further price increase in coal and paddy, a drastic cut in non-productive government expenditure, a squeeze on trade credit which is enabling traders to withhold supplies from the market while making credit available to manufacturers, an increase in interest rates while providing concessional rates to farmers, the regulation of sugar releases to bring down its price, and the maintenance of stable prices of essential commodities especially foodgrains, edible oils, sugar and cloth. Following the Union government's decision for an expanded public distribution of essential goods to be launched on July 1, on which the states were asked in an end April communication to set up a system of procurement of essential commodities, to organise storage in well located points, and a review of fair price and cooperative shops to establish additional outlets so that there is one shop for every 2,000 people, arrangements for the scheme gathered momentum in May. STC has arranged import of 3.55 lakh tonnes of edible oils, the National Agricultural Cooperative Marketing Federation has procured large stocks of pulses including some imports, a buffer of 5 lakh tonnes of sugar and the large stocks of wheat and rice which have been further increased as a result of rabi procurement are some of the steps taken to launch the enlarged public distribution system. The government also announced the setting up of the Committee headed by Mr. S. M. Mishra on government expenditure and means of effecting economies as promised in the budget. The inflationary situation however requires action on the money supply and speculation side.

Union Loans and Asoka Mehta Report

The Union government on May 10 announced the issue of 3 loans totalling Rs 500 crores. By May 26 when the subscriptions were received, the 3 loans were fully subscribed. The Union has now reached 40 per cent of its net borrowing of Rs. 1,850 crores for 1979-80. The NDC at its May meeting received the Asoka Mehta committee report (see vol. VIII, pp. 566-567) where disagreements were expressed over the replacement of the existing 3 tier system for Panchayati Raj, the need to keep out political parties in Panchayat elections and the reconstitution of the Panchayti Courts. It was decided to constitute a small committee of Chief Ministers with Union Agricultural Minister as Chairman to examine the question of some agreed guidelines for model state legislation on Panchayati Raj Institutions.

Economy and Industry

The World Bank appraisal of the state of Indian economy — for the July Aid Consortium meeting — was that the government's careful policy was eliciting a good but slow response from the economy. The agricultural and population policies are sound. It describes the policy reserving certain areas for small industries

as being a soft area needing clarification so that the controversy between those advocating further development of heavy industry and those favouring small and village industries can be resolved. Industrial growth was a result of price stability, liberal imports and relaxed licensing arrangements and the increased agricultural production was due in part to good weather but also in part to expanded irrigation, so that the base production in agriculture now would be higher than what it was five years ago. The increased investments in agriculture will create a stable base in the countryside in 10 to 15 years. With regard to small scale industry, the total number of small units registered in 1977 was 26,519 and in 1978, 31, 327, with Tamil Nadu occupying the first place at 4,744 and 8,621 in the two years. The Vadilal Dagli Committee appointed to review the controls and subsidies system (see vol. VIII, p. 212) submitted its report to government in May. It has recommended wide ranging changes in the pattern of control and subsidies in order to dilute its inherent class character benefiting the upper 10 per cent of business, professionals, bureaucracy, traders and rural rich. Government subsidies have increased from Rs. 96 crores in 1970-71 to Rs. 1,600 crores in 1978-79. It has recommended monetary discipline for the private sector to avoid the increasing generation of black money and fiscal discipline for the government, the abolition of the high sounding offices of the controllers of cement, steel, aluminium and drugs and the clamping of some controls on the modern small scale industry in order to facilitate the uncompetitive growth of the tiny and village sector industries. The Union government announced in May that it would license fresh capacity in those sectors of industry where capacity utilisation level has touched 70 per cent in order to avoid conditions of shortages of essential commodities and raw materials. The engineering industry attained a growth rate of 13.5 per cent in 1978-79 with an output of Rs. 10,000 crores, due to the general buoyancy of the economy and has set for itself a target of 15 per cent growth for the current year. In 10 months April to January 1978-79 exports amounted to Rs. 521 crores against the target of Rs. 720 crores and it had orders for Rs. 974 crores for the coming year. On the other hand the annual survey of the top 251 private sector's firms by the Economic Times shows that for 1977-78 all the profitability ratios declined — gross returns on net sales from 10.3 to 9.9 per cent and on total capital from 11.6 to 11.1 per cent, profits after tax on net worth from 9.2 to 8.5 per cent with gross profits being negative for 25 largest companies (up from 14 in the previous year) and those suffering a net loss increasing from 40 to 42.

Public Sector Performance

A working group in the Bureau of Public Enterprises has identified 16 units in the public sector and has recommended that 7 of them should be sold off to the private sector, one of them close down and the rest suspend production. The units are: 1) Artificial Limbs manufacturing making losses from 1976-77, 2) National Instruments losses from 1976-77 3) Mandya National Paper from 1976-77, 4) Sambhart Salts from 1975-76 5) Bharat Leather Corporation from 1976-77, 6) National Small Industries Corporation from 1973-74, 7) National Textiles from 1974-75, 8) Tannery and Foodwear from 1969-70, 9) Bharat Opthalmic Glass from 1968-69, 10) Bharat Heavy Plates and Vessels from 1969-70, 11) Bharat Pumps and Compressors from 1970-71, 12) Braithwaite from 1971-72, 13) Scooters India from 1974-75, 14) Burn Standard from 1973-74, 15) Arthur Butlar from 1975-76 and 16) Brittania Engineering from 1975-76. In

the public sector, government has invested Rs.12,851 crores, loans amounting to Rs 4,500 crores plus Rs, 11,932.37 crores in the current year and a capital outlay of Rs 1,036.77 crores. The financial institutions are providing Rs. 466 31 crores this year in loans. In addition to the above 16, 13 others including Coal India, Fertilizer Corporation, Hindustan Antibiotics and Bharat Aluminium have been making losses continuously over the past 5 years of Rs. 427. 12 crores. A meeting of these loss making units is being held at the end of June to review their functioning and decide on measures for improved and profitab'e functioning. The government has declared that there will be no sale of any of these units to the private sector. The exercise by the Bureau of Public Enterprises was, however, good in that it has focussed attention on a major problem.

National Production Front

Steel

The public sector steel plants—Bhilai and Rourkela report a 5-6 per cent productivity increase as a result of the use of imported coking coal in 1978-79. For the current year, 1.2 million tonnes have been contracted and 30,000 tonnes will arrive in May to be shared between DSP and Rourkela and 9.62 lakh tonnes will arrive in December. The imports will also conserve the limited reserve of indigenous coking coal. Steel R & D has been increased by Rs. 4 crores to Rs. 6.33 crores for the current year for work on indigenous process improvement and new technology to meet the challenge of fast changing technology in this industry. The government announced in May that 3 lakh tonnes more of steel will be available before June end and the total supply this year will be 20 per cent more than last year. Up to 2 lakh tonnes imports arrived by March and 3 lakh tonnes will arrive in June. The export of semis, bars, and rods has been banned. Steel supply to small house builders has been increased and the integrated steel plants have been asked to reserve 50,000 tonnes of bars and rods from the existing stocks and make them available at stock yard prices. Also steel supply to small industrial units which increased from 1.76 lakh tonnes in1977-78 to 3.33 lakh tonnes is expected to increase further this year and SIDCOs have been asked to ensure proper use of steel supplies by small supplies. In May it was decided to bring TISCO production under SAIL's regulated distribution. Also under a new scheme of the steel ministry, Rural Distribution Centres have been made the focal point for steel distribution in rural areas. 120 such centres will be opened, starting with 80 by September and a further 40 by March. Each centre will supply 50 tonnes per month of certain categories of steel under the state apex cooperative marketing societies and the State Agro-Industries Corporation with the help of SAIL. The Planning Commission's working group estimates that there will be a marginal surplus of 43,000 tonnes of steel at the end of the Plan period 1982-83, which will turn into a shortfall of 4.34 lakh tonnes necessitating the commissioning of phase I of the Vizag plant. The Public Investment Board approved in May the Rs. 2,095 crores Vizag plant with Soviet assistance. By 1988-89, the completion of the 3 million tonnes plant will give a surplus of 28,000 tonnes, calling for a second plant with a capacity of 1.5 to 2 million tonnes. The outlay recommended for the Sixth Plan for this programme is Rs. 3,719.09 crores and for 1983-84 Rs. 619.51 crores.

Crude

The demand for petroleum products for 1979-80 will be 32.5 million tonnes compared to 30.5 million tonnes in

1978-79. To meet the demand, domestic production will be 13 million tonnes and imports 16.5 million tonnes. Crude supplies contracted for the year are 16.9 million tonnes, including 2 6 million tonnes from Iran following the agreement in May. In addition, the Soviet Union will supply 6 lakh tonnes of crude in exchange for wheat, (see last issue, p. 245), thus bringing total crude imports to 17.5 million tonnes. With this total of crude and the further import of 2.56 million tonnes of kerosene, HSD and naphtha, the supply position is adequate. The government is negotiating for a further 1.5 million tonnes of petroleum products to build up inventories from the present 21 days to 90 days. All this is at the cost of an additional foreign exchange outgo of Rs. 200 crores, over and above the Rs 500 crores that was computed. Soon after the 2.6 million tonnes of crude from Iran was negotiated, the surcharge was raised by 60 cents per barrel (from $ 16.57 to $ 17.30) involving an additional outgo of Rs. 10 crores. Iraq, our largest supplier, has increased the surcharge twice involving an additional Rs. 40 crores. All suppliers except Saudi Arabia (which is not a major supplier) have raised prices and are doing so continuously. Under these conditions the first action is to economise on use. The state governments have been told to manage things within the limits of availability and the oil companies are nominating a district level coordinator to assist district authorities in ensuring equitable distribution of petroleum products and curbing malpractices. The main problem is kerosene and diesel whose consumption grew at a high 11 per cent in 1978-79 and which account for 45 per cent of the total consumption of petroleum products in the country. It is these products whose consumption must be reduced by increased use of coal and biofuels. Petrol consumption is only 5 per cent of total petroleum product consumption and its use grew by 7 per cent in 1978-79. With the rise in petrol prices from March, its consumption has fallen in March and April by 15 per cent. The Union government has ordered a reduction of 1/3 petrol for staff cars, 15 per cent for field officers' cars and 900 litres a year for ministers' cars. The other action needed is a moderate increase in domestic crude production, moderate because the country's proven oil reserves are only 303 million tonnes, which if exploited at the rate of 18 million tonnes from 1982-83 will last till the end of the century, if stepped up, will be depleted earlier. Despite increased efforts the rate of discovery of new sources is slow. In May ONGC reports discovering a new 20 million tonnes field in Jhalora in Gujarat which is yielding 600 tonnes a day. But the oil level in almost all Gujarat fields - Ankleshwar pegged at 2.7 million tonnes (from 3 million tonnes) per annum, Navagam at 600 tonnes per day (from 800 tonnes), and Kalol at 500 tonnes (from 1,000 tonnes) per day. Out of the estimated Gujarat oil reserves of 350 million tonnes, 92 5 million tonnes only are recoverable. ONGC also reports that it will start drilling in the deep waters off Andhra Pradesh and the Kasargode sector in the West Coast. The exploration in the Cauvery basin had showed that there was no possibility of commercial exploitation in that area, it reports.

Coal

In May serious coal shortages were reported by a) Maharashtra and Gujarat which led to closing of some thermal plants and increased power cuts which led the Union cabinet to devise an emergency plan to rush coal to the 2 states with 150 wagons per day, b) Punjab, Haryana and Delhi which led industries to cut production, including

that intended for exports, which was represented urgently to the Union Government as a means of ensuring regular wagon supply and c) Tamil Nadu and the Southern states where thermal, cement and textile units were seriously affected in part due to the disruption to the railway track caused by the cyclone. There is a long term problem of supply-demand disequilibrium in coal. The coal target for the year is fixed at 118 million tonnes, which may not be met if the April production which showed no increase continues. Again coal demand for the year is computed at 120-122 million tonnes which even the full target cannot meet. On top of all this, there is the transport bottleneck. Of the present level of production of 103 million tonnes, only 85 to 86 million tonnes can be moved by road. The railways are facing difficulties in increasing their wagon fleet, for which a fresh order of 22.000 wagons have been placed, which may be met only with the import of 6,000 wheel sets. CIL plans to produce 100 83 million tonnes and reduce its pithead stocks by 3 37 million tonnes. The main issue is for coal to reach the users and on this a Parliamentary team is visiting the mines to satisfy itself on the responsibility of the shortfall and what should be done about it. In mid May two days before the threatened coal miners' strike, the government reached agreement with the miners on wages and other benefits which resulted in the calling off of the strike. The wage agreement will cost Rs. 114 crores additionally to the annual Rs. 480 crores wage bill and will increase the gap between the cost of production and the current statutory price by Rs. 12 per tonne. This is the case for a rise in the price of coal.

Aluminium

Against the production of aluminium of 2.14 lakh tonnes in 1978-79 the government has set a target of 2.5 lakh tonnes for domestic production for the current year and is planning to import 75,000 tonnes of which the major part will be EC grade. It announced in early May new guidelines for aluminium distribution under which each user's entitlement will be determined on the basis of its capacity and the maximum offtake during the last 4 years, prorated to availability. New units and those reopening after a period of closure will have their claims examined by the Development Commissioner of Small Scale Industries who will recommend allotments to the Controller of Aluminium. Monthly statements by the users will have to be submitted to ensure effective execution of the guidelines. The varying cost of production of the 4 units - BALCO, HINDALCO, INDALCO and MALCO varies widely from Rs. 20,378 per tonne for BALCO to Rs. 4,803 for INDALCO due to divergence in capital investment per tonne and different power rates, BALCO's very high unit cost is explained by the Ministry of Industry as being due to the high depreciation and interest on its large capital and high power rates charged. That only 30 per cent of its capacity is used is blamed on inadequate power supply by the Madhya Pradesh Electricity Board. The Bureau of Industrial Costs and Prices has examined these costs and it is to be hoped that its recommendations will be acted upon

Sugar and Cement

ISMA reports that sugar production during the second half of April declined to 3.4 lakh tonnes (against 4.25 lakh tonnes in the second half of April 1978), during April production was 7.62 lakh tonnes (against 9.37 lakh tonnes in April 1978), so that the total output for the first seven

months of the season 1978-79 was 54.02 lakh tonnes compared to 54.55 lakh tonnes during the corresponding previous year. The offtake from factories in April was 4.11 lakh tonnes for internal consumption and 55,000 tonnes for export, with the total offtake in the seven months of the season being 35 lakh tonnes for internal consumption and 5.78 lakh tonnes for exports (compared to 25.64 lakh tonnes and nil during the previous year). ISMA also reports that sugarcane arrears are mounting at Rs. 120.25 crores in early May, 90 per cent of the 270 factories have become eligible for takeover by the government, as they have passed the 10 per cent limit set by the Sugar Undertaking Act. Hence the Association pleads for liberal cash credit arrangements by banks and a higher retail price - neither of which rests on sound grounds. The World Sugar Journal reports world sugar production as 91.6 million tonnes well above world consumption of 90.6 million tonnes and the opening stocks for the year increased from 18.8 million tonnes in the previous year to 23.6 million tonnes for the 1978-79 season. It is also reported that US may ratify the International Sugar Agreement (see vol. VII, p. 638) and so arrest the slump in world sugar prices, which India has been looking forward to. On the cement front, production in January-April declined by 4.3 lakh tonnes to 63.5 lakh tonnes and capacity use declined by 7 per cent to 87.2 per cent. Due to coal shortage, 14 cement units closed down in January with a production loss of 76,000 tonnes, 11 units closed in February losing 43,000 tonnes and 10 units in March involving a loss of 56,000 tonnes. With the monsoons, the coal supply position may worsen, though the power supply may improve. Coal and wagon supply need to be regulated and ensured for the industry. In early May the government continuing the present system of control on prices and distribution of cement announced a five tier system of retention prices, replacing the present 3 tier system. New units will continue to get Rs. 296 per tonne, 53 older units now classified into 3 categories will have a retention price of Rs. 185, Rs. 205 and Rs. 220 per tonne and the units in hilly areas will have a higher retention price, with a uniform destination price.

Textiles, Jute and Drugs

A voluntary roll back of textile prices to the level prevailing in the last week of October 1978 suggested by ICMF was announced inMay which means that all composite mills will roll back ex-mill prices of cotton fabrics and all mills selling cotton yarn, including hanks, cones, etc. to the October 1978 levels. NTC will also reduce the price of cloth and yarn along the same lines. The government also had under study a 50 per cent increase in the production of controlled cloth by the organised sector mills - from 400 million sq. metres to 600 million sq. metres to meet the rapid increase in the demand for such cloth. The proposed jute buffer stock at a level of 7 lakh bales to be stocked in mill godowns at prices and sharing of interest charges was the subject of negotiations between IJMA, JCI and the Union government in May. The buffer will help JCI which has procured 8.6 lakh bales and is already acting as a stabilising force in the market. At the world level, however, UNCTAD reports that the main jute producing countries are dropping the international buffer stock plan because the developed countries are insisting on protecting their jute processing industries and resist jute manufacturers from the developing countries. Hence the move is to expand jute export rather stabilise its price through buffer arrangement. On drugs, the Union government reiterated its position that the Drug Prices Control Order 1979 will be implemented fully, that the industry will have to conform to it, that it

is based on the Hathi Committee recommendations (see vol. V, p 659) and will bring down prices of essential drugs of mass consumption, as has been done in the case of 500 formulations in the last year. It will penalise the kind of mock ups - in one case it was as high as 800 per cent. Investment in the industry is growing - of the Rs. 150 crores projected for VI Plan, Rs. 32.97 crores in the first year and Rs. 31.31 crores in the public sector for this year have been approved.

Agricultural Production

Rabi procurement of wheat in Punjab, Haryana, UP, Rajasthan and West Bengal is proceeding briskly and by May 20 the government reports that FCI and State agencies had purchased 4.2 million tonnes compared to 2.74 million tonnes at that time in 1978. As against the support price of Rs. 115 per quintal (see vol. IX, p. 20) the actual open market prices ranged from Rs. 95 to Rs. 140 per quintal depending on the quality of wheat. There is some question whether the small farmer who needs cash is being forced to sell his wheat at a lower price, though the purchase centres of which there are 776 in Punjab, 163 in Haryana, 2,769 in UP, 204 in Rajasthan, 292 in MP and 533 in Bihar should ensure him a fair price. This step up in market procurement is straining the storage capacity so that most of the wheat now being purchased is being stored in the open under cover and plinth (CAP). FCI also reports that unlike previous years it has more rice than wheat because of the record rice procurement in 1978-79 of 57 lakh tonnes so that on April 1, 1979 the FCI stocks were 88 lakh tonnes rice and 51 lakh tonnes wheat. The offtake of rice from the public distribution system has been declining (including the demand from Kerala), while the demand for wheat even from rice growing states like West Bengal has been increasing. The Agricultural Prices Commission (APC) recommended in May a support price of Rs. 90 per quintal of paddy (up from last year's Rs. 85) and Rs. 85 per quintal of coarse grains. The Commission has classified rice into 3 categories instead of the previous 5. Rs. 90 is recommended for the common variety, the other being fine and superfine. The rice growing states have been pressing for a higher price for paddy at or near the wheat support price of Rs. 115 per quintal. The Union government has been consulting the states and is expected to announce the paddy support price by the end of May. APC has also recommended a support price of Rs. 7.50 per kg. for VFC tobacco for the 1978-79 crop. The state of agriculture in May varies from state to state. AP farmers in the 3 districts affected by the cyclone are facing heavy losses of paddy, betelnuts, coconuts and tobacco. But even before that the farmers producing paddy, tobacco and sugarcane are faced with a serious marketing problem. The state's marketing agencies are poor and as a result the state farmers are reformulating their crop plans. They are now resorting to long duration common varieties which come to harvest in 5 months in preference to short varieties and instead of a second paddy crop, pulses, gingelly, cotton and groundnut are to be grown in rice fallows. With a good monsoon the state can produce 105 lakh tonnes of food including 55-74 lakh tonnes of rice. West Bengal reports severe drought conditions in 11 of its 15 districts so that only 25 per cent of the jute crop was sown by the end of May. The dry sown AUS paddy has died from dehydration and where the crop has grown is awaiting rains. In Rajasthan as a result of improved agricultural methods, the average production of paddy has increased from 20 quintals to 42 quintals per hectare in the Chambal Command area. In Haryana's chronically water logged and

flood ravaged Mewat area rice, pulses and groundnut are fast replacing bajra as the principal kharif crop. In Sonepat, Rohtak, Jind and Gurgaon, the high water table and water logging over 1.1 million hectares is leading to replacement of gram and bajra and wheat by rice, jute sunflower, and barley. The Union agricultural ministry is planning to make the growing of groundnuts and other oil seeds which are rain fed crops, irrigated crops in a massive manner as one way of meeting the shortfall in oil seeds and pulses. Jute is planned to be brought under the monopoly procurement programme and a scheme to that effect has been drawn up by the Industry Ministry as from 1980-81. In a report to Parliament, the government states that the country has a potential of 58.5 million hectares in major and medium irrigation and 55 million hectares in minor irrigation, of which up to 1978-79, 26.2 million hectares in major and medium and 28.7 million hectares in minor irrigation have been created. In this Punjab stands first with a potential of 6.5 million hectares and a creation of 5.1 million hectares followed by Tamil Nadu with a potential of 3.9 million hectares (1.5 million major and medium and 2.4 million hectares (minor) and 3 million hectares realised 1.178 million hectares major and medium and 1.849 million hectares in minor irrigation).

Exports

Provisional figures show that in 1978-79 exports at Rs. 5,544 crores increased by 5.5 per cent over that of the previous year and imports increased to Rs. 6,606.27 crores, being an increase of 13.2 per cent over 1977-78 imports. The trade deficit for 1978-79 is Rs. 1,062 crores compared to the deficit of Rs 579.49 crores for 1977-78. The Revised Estimates for 1977-78 are slightly different with exports at Rs.5,404.23 crores and imports at Rs. 6,025 29 crores, giving a deficit of Rs. 621.03 crores. The pick up in exports occurred after November 1978 and was aided by various measures of export promotion including capacity expansion in export industries, opening of new markets in both developing and developed countries, the relative price stability during the year, the useful suggestions made by the leather, jewellery, electronics, small sector and agricultural products task forces and the involvement of many union ministers, financial and public and private sector institutions and state governments. Even so the export efforts reflected the continued stagnation of the economy and the unfavourable external factors such as the growing protectionism in the industrialised countries, the decline in commodity prices particularly tea and coffee, and the instability in the foreign exchange markets. For the year 1979-80 the new import policy announced in May continues last year's liberalised policy, provides for broader based duty exemption through advance licenses, with some pruning of banned and restricted items, some project exports and concessions to non - resident Indians. It is to be hoped that the policy will provide a stimulus to domestic production and push forward exports. The liberal selective imports of capital goods and the freedom to update technology should improve the investment outlook of the economy, hold down capital costs and increase productivity. These are the tests of the new policy. On the export of particular items, NAFED reports that it has exported the entire quota of 25,000 tonnes of HPS groundnuts allotted to it for this season. On the other hand the export of 5 lakh tonnes molasses from Tamil Nadu is being held up because of inadequate STC infrastructural facilities which need early action. $ 2 million of glass products have been ordered by South East Asian countries and Australia, which can be

further expanded if the shipping services to this area are improved.

Aid

IDA and India signed in early May an agreement for a credit of $ 48 millions for water supply and sewerage improvements in some Maharashtra towns and villages. EEC announced grant to India of 31,000 tonnes of powdered milk, and 13,000 tonnes of butter oil plus a quantity of cereals.

International

Bangladesh

In May, India and Bangladesh signed an agreement under which India is to provide a loan to Bangladesh of 50,000 tonnes of wheat and 1.50 lakh tonnes of rice, following the overall agreement reached by the Prime Minister with Bangladesh President (see last issue p. 251). Also India and Bangladesh agreed on cooperation in the tea industry including R & D in this area.

World Monetary Reform

In May gold prices soared in Europe to reach $ 277.375 an ounce. The U. S. Dollar strengthened against the Yen, the West German Mark and the Swiss Franc. IMF announced a reduction in its monthly gold sales, as it is now left with only 5 3 million ounces out of the 25 million ounces it was scheduled to sell. For June it will sell 4,44,000 ounces instead of the usual 4,70,000.

UNCTAD

UNCTAD V opened on May 7 at Manila with a carefully prepared agenda which included trade and the problem of growing protectionism, the common fund for commodities with its second window, financial measures for stabilising the export earnings of developing countries, a new medium source of financing for developing countries and an international code for the transfer of technology. The Managing Director of IMF called attention to the developing countries(non oil producing) facing a combined payments deficit of $ 40 billion this year and their total debts being 27 per cent of their GDP. The World Bank President called for a halt to the growing tide of protectionism which is undermining economic development and international cooperation of the last 25 years and is fuelling inflation and unemployment in the industrialised countries. He referred to a recent study in the US which shows that the protectionist measures in that country between 1975 and1977 had cost US consumers $ 660 million in sugar, $ 1,250 million in carbon steel, $ 400 to 800 million in meat, $ 500 million in television sets, $ 1,200 million in footwear. FAO reported to the conference that while world agricultural trade will increase upto 1985, the developing countries face a threat of worsening food security because of widening deficit in basic food stuffs. An UNCTAD paper on the integrated programme of commodities urges a liberalised IMF facility for stabilisation of commodity export earnings of developing countries which would be delinked from quotas and balance of payments criterion. At the conference a number of pledges to the second window of the Common Fund were made including Norway of $ 22 million. The conference agreed unanimously that there will be a meeting to deal with one aspect of technology transfer, namely trade marks. It also agreed on a resolution on the brain-drain which might lead to compensation to the developing countries training skilled emigrants and on the revision of the Paris convention for protection of intellectual property. By mid May

the crucial phase of negotiations in 8 groups which will deal with the key issue of the North-South dialogue, involving, structural changes and adjustments in preparation for which the group of 77 tabled a resolution calling for setting up a high level expert group to prepare a report for global consultations on policies in trade, development, money and finance to promote the restructuring of the international economy.

GATT

The Tokyo round agreement (see last issue, p 252) which has not been signed by the developing countries is being reviewed at Manila — UNCTAD V. If the developing countries refuse to sign the agreement because it does not meet their needs, the agreement will be one only among the industrialised countries and will be a set back. The industrialised countries feel that with their major economic troubles they cannot give more to the developing world and that some of the developing countries have grown up, are competing on equal terms with them and so must agree not to raise tariffs without prior consultation. This reciprocity is resisted by the developing countries and at Manila the final decision on the Tokyo round will be made by them.

Brandt Commission

The Independent Commission for International Development Problems, known as the Brandt Commission, established in 1977 to follow up the Lester Pearson Commission 10 years ago is in the final stages of its work in reviewing the relation between the developing countries and the industrialised which it proposes should be based on mutual interest. Its 17 members drawn from a wide group of countries are aiming at consensus on its recommendations that could influence international ecnomic relations, modify the North-South confrontation and involve the transfer of some of the arms expenditure to development. It is examining the possibility of an international tax system, the reform of the world finance market and the quicker industrialisation of the developing countries. Its report is to be published in October.

World Food

US Department of Agriculture estimates that the total world foodgrains production for the year 1978-79 at 1 178 billion tonnes, with world demand at 1.142 billion tonnes and world reserves on July 1 at 207 million tonnes. For 1979-80 it forecasts a production of 1. 6 billion tonnes with reserves falling to 162 million tonnes. In this connection an expert opinion points out that India, China and USSR contribute to fluctuations in foodgrains production and that India has more and better land for such production than China and should move quickly to producing 300 million tonnes instead of the current 125-126 million tonnes.

ADB

The Asian Development Bank at its annual meeting in May decided on its programme in the eighties — increased assistance to agriculture, irrigation, grain storage, rural small industries and development of coal, hydro power and other domestic energy resources. For this, the annual lending by the Bank will be increased by 20 per cent during the 4 years 1979-82 during which time $ 2 1 billion will be available to the poorer member countries in soft loans In 1978 loans totalled $ 1.2 billions The main thrust of the Bank would be to help its member countries meet the energy crisis through the development of hydropower, coal and other local fuels. It will finance local cost expenditures and increase its programme lending and use consultants increasingly from developing countries.

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II Agricultural Development

Paddy

An early maturing paddy variety,-Amaravathi, with a duration of 85 to 90 days is coming into use in the multiple cropping sequence of 3 rice crops or 2 rice and 1 groundnut or 2 rice and 1 ragi crop. It has performed well in both navarai and sornawari seasons with low water requirements. With the completion of the samba crop in Thanjavur district and some withholding of stocks by the large farmers, the prices of paddy in the open paddy markets in the district showed an upward trend of Rs. 3.4 per bag. The Union government will be announcing the support price of paddy well ahead of the Kharif season for the first time. The Union government also stated that it would have no objection if the state government wished to give a higher price for paddy provided it (the state government) paid for the extra cost.

Research Results

Research on various plant diseases are producing useful counteractive results. Mycoplasma diseases like yellows, witches broom, little leaf etc. transmitted mostly by leaf and plant hoppers affecting paddy, citrus, cloves, pulses, papaya and egg plant it is now demonstrated can be countered by a combination of antibiotics and heat therapy. Similarly the yellow Aphids which attack potato, brinjal, tobacco and chillies, particularly the latter which is a major export crop in the state grown over 70,000 hectares yielding about 1 lakh tonnes of chillies, involving a pest-due loss of Rs. 17.50 crores to the State farmers. Research has identified two pesticides which control the pest in chillies and brinjals and the demonstration at the Tamil Nadu Agricultural University points to the need to import at least one of the pesticides, Methamidaphos, on an adequate scale to save the heavy losses suffered by farmers. Also virus diseases are attacking citrus and other fruit plants and one of the remedies shown by research is to identify virus free plants and propagate them by tissue culture as is being done for tubers. sugarcane, cabbage, turmeric, teak and eucalyptus. Again the control of the pink boll worm of cotton by spraying a synthesised pheromone has proved successful, snails attacking paddy and other vegetable crops like pumpkin, brinjal, cauliflower and cabbage also cause considerable damage in the state. They also endanger the livestock population. Here research needs to be intensified to check this problem, using mollucides and other integrated methods which point the way to checking their spread. On the positive side, a bold seeded, fertiliser responsive mustard variety Varuna has been released which is pest resistant, comes to harvest in 125-130 days and yields 25 quintals of mustard per hectare. The Tamil Nadu Agricultural University recommends growing the Andaman Dwarf, or West Coast Tall or Cochin China and New Guinea coconut varieties in groves near cities for tender coconut production. Studies indicate that propagation of new varieties of fruit plants or vegetables can be furthered by air layering or stem layering, which is also called footying. Research has also produced a superior hybrid mango which is a cross between Alphonso and Banganapalle and the means of countering mango malformation in the trees through spraying of NAA. It is also found that in water logged low lying areas, quick growing fishes like Katla, Carp, Mrigal can be reared along with paddy. The Kaveri Engineering Industries reports the development of an equipment for

direct application of anhydrous ammonia, which is a rich source of nitrogen in the soil. The application is to be used with a hydraulic 3 point linkage hector to achieve the necessary depth of injection. The Tamil Nadu Agricultural University is studying further through field experiments how to get the maximum nitrogen enrichment in different types of soil and how to rate the equipment to the different crop needs.

Dairy Farming

Total milk production in 1978-79 in the country including this state was 27.5 million tonnes (in the organised sector the demand for milk in urban areas is 53 lakh litres per day which is equal to 1.94 million tonnes per year). As a result of Operation Flood II total milk production will increase to 35 million tonnes by the end of the VI Plan. Operation Flood II which was sanctioned by the Union government in October 1978 is based on the Anand pattern of cooperatives, milk producers' societies and unions and will cover 155 districts and 148 cities. It will improve milch cattle through scientific breeding and better veterinary services. in this state, the government must give up the state organisation, if it really intends to follow the successful Anand pattern, letting the producers form the Union and run the service.

Fish Farming

Fish farming research at Tuticorin, Coimbatore, Bhavanisagar and Pondicherry show the potential of sewage recycling for fish culture. The Coimbatore campus sewage scheme showed fish production to be double of that under fresh water conditions, with lower costs. Also a closed water recirculation system for fish and prawn culture, and a multi purpose hatchery jar where 40,000 eggs are incubated have been successfully designed.

Tea

1978-79 was a bad year for tea exports and prices. Exports were 166.26 million kg. compared to 221.52 million in 1977-78 (a fall of 25 per cent) and the earning was Rs. 328.56 crores compared to Rs.563.72 crores in 1977-78 (a fall of 42 per cent). Tea production in 1978 was good at 571.3 million kg. (560.8 million kg. in 1977), which means that the 11 million kg. rise in world crop was contributed entirely by India. Tea prices have been falling since their 1977 boom, but its continuance is disturbing in January / March 1979 compared to January / March 1978, prices fell by 11.9 to 14.2 per cent for South India. and North Indian tea in London and by 9.1 at Cochin and 14.6 per cent in calcutta. If this continuing price decline is due to higher production, it will continue this year. Tea output in South India during January-March 1979 reached a peak level of 35.7 million kg., an increase of 28 per cent. In fact 1979 production is expected to be 485 million kg. in compared to 458 million kg. in 1977. India is losing export markets. UK has cut its purchase of Indian tea and switched to Kenya and US has switched to Sri Lanka. There is need for pin pointed publicity suited to each country in place of general promotion campaign as outlined in vol VII, p 515.

Coffee

Coffee production for 1978-79 is estimated at 1.05 lakh tonnes In the 11 months April-February 1978-79, 58,818 tonnes valued at Rs. 141.69 crores were exported against 46,533 tonnes valued at Rs. 197.8 crores during the same period in 1977-78. Export prices of coffee have declined and are continuing to do so. The coffee development perspective plan requires that the area under coffee increase

from 1.71 lakh hectares to 3 lakh hectares, of which 72,000 hectares would be in nontraditional areas (AP 16,000, Orissa 4,000, Assam 16,000, Nagaland, Mizoram and Arunachal Pradesh 36,000 hectares), and 58,000 hectares in the traditional areas of Karnataka, Kerala and Tamil Nadu. The Coffee Board reports that during the Fifth Plan the area under coffee increased from 1.39 lakh hectares to 1.86 lakh hectares and production rose from 86,388 tonnes to 1.18 lakh tonnes. Out of 80,587 holdings, 96 per cent (77,168 holdings) were below 10 hectares, with small growers increasing their share of total production from 35 to 42 per cent and the payments to growers increased from Rs. 5.33 kg. point to Rs. 11.25. World coffee production is marked by sufficiency at 60.3 million bags for 1978-79, which coexists with an upward trend in coffee prices which might arrest the decline referred to earlier.

Rubber

Despite the increased production of natural rubber which was 16,740 tonnes in January 1979 (558 tonnes more than in January 1978), consumption in January 1979 increased by 2,649 tonnes. This may be one reason for the acute shortage of natural rubber in the market, the other reason being the slow distribution of imported rubber. The government therefore decided in May to import 30,000 additional tonnes and to ensure its early availability instructed STC to purchase it from Malaysia.

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III Industrial Development

Kalpakkam

DAE reports that the first 2,36,000 KW turbo-generator at Kalpakkam was commissioned in May. On May 21 the turbo generator started rolling with steam from the special boilers, thus setting in motion the entire conventional system of the project. On the nuclear side, all equipment is reported to be installed so that it now needs steam from the nuclear boilers. The Union government has indicated that it will soon approve the state government's plan for using the coolant water from Kalpakkam for salt manufacture. The plant's coolant water will be drawn for manufacture of salt on either side of the Buckingham canal. The 50 cusecs of coolant water let into the canal will also make it navigable. DAE also reports that it is facing problems including the price factor in acquiring enriched uranium fuel for Kalpakkam's Fast Breeder Reactor, delaying its commissioning. As a result, DAE is developing an alternative fuel for the Fast Breeder Reactor.

BHEL

The BHEL -Siemens collaboration agreement has been the subject of debate in Parliament and in the press. The agreement covers product technology, system engineering technology and sharing of R & D programmes. The Committee on Public Undertaking has passed strictures on the agreement and so, the government has appointed a committee of secretaries headed by Dr. Raja Ramanna, Scientific Adviser to the Ministry of Defence to examine the technical aspects of the agreement and submit an early report on its conclusions.

HPF

The studios in the South reported in May an acute shortage of raw film particularly sound negative and black and white positive which has affected 650 films in various stages of production and given the difficulty of HPF clearing the backlog of 4,000 rolls of sound negative and black and white positive film and meeting the average daily requirement of 300 rolls of either category, have urged import of 10,000 rolls of black and white positive and 10,000 rolls of sound negative film. HPF's capacity it is pointed out, is 40,000 rolls per month against the monthly requirement of 55.000 rolls of black and white and sound negative film. Against this background, HPF management reports that it is examining proposals from five foreign photo film companies for participation in the expansion of the plants to produce cine colour positive films at a cost of Rs. 50-60 crores and a coating plant for Rs. 30 crores. Also a project to manufacture photo paper was under discussion. The comprehensive plan included manufacture of processing chemicals, colour paper, magnetic tapes, and a number of other sophisticated photo products, with the foreign collaboration involving arrangements for technology transfer and buy back of products. The Ambattur conversion plant at a cost of Rs 3 crores is expected to go into production in July.

Ashok Leyland

The Union Industry Ministry has directed Ashok Leyland to expand its production from the present 12,500 to 40,000 vehicles per annum, with an immediate increase of 20,000. For this the company has asked the International Financial Corporation for a loan of Rs. 260 crores, including Rs. 100 crores in foreign exchange. The first phase expansion will be undertaken in the plants located in Hosur and Ennore. The Company has in mind the country's road conditions, the load factor and maintenance and operation problems and so places emphasis rightly on a rugged, durable and reliable engine with savings in fuel. Working 3 shifts the company plans to produce 13,000 vehicles this year and 15,000 next year.

Coir and Sugar

Further to the report on production and export of mechanised coir mats by the Nagercoil unit referred to in the last issue (see p 260) the further question whether the ban on the production of coir brush mats by the mechanised unit at Nagercoil will continue or not is under examination of the Union Ministry of law, as recommended by the Sivaraman Committee. The Unit has cent per cent export obligations, which it is now fast losing to other countries because of the Kerala government's protest against mechanisation of the coir industry and the ban imposed and the Coir Board directed not to take orders from the unit. With this kind of policy, it is not surprising that India which has a monopoly in certain coir products has been steadily losing ground in the export market from 61,725 tonnes in 1968-69 to 37, 284 tonnes

in 1975-76, a 34 per cent decline. As a result of negotiations and a threatened strike, the wages of sugar mill workers have been raised respectively from October 1, 1978 making Tamil Nadu sugar workers at Rs. 383.40 the highest paid in the country (the UP workers get Rs. 348.40, AP. Rs. 353.40 and Karnataka Rs. 358.40).

Cement and Textiles

Cement factories are facing a major crisis with fast depleting coal stocks and reduced supply, in part due to the cyclone disruption of the railway line as referred to earlier. The 7 cement factories in the state have less than 15 days' coal stocks. 85 per cent of their supply is met from Singareni Collieries. Supplies from the North are held up at Waltair which has become a bottleneck. On the textile front, 186 Southern mills report a production in March of 1 42 lakh bales of yarn, despite the 30 per cent power cut in the state faced by the mills and not being allowed to work one day in the seven working days in the week. After providing for cloth manufacture in the composite mills, the availability in March for the decentralized sector was 86,376 bales of cotton yarn, 14,863 bales of blended yarn and 18,488 bales of viscose staple fibre yarns. The decision of the Union Commerce Ministry to set aside special quota to Tamil Nadu manufacturing exporters for exporting readymade garments for the current year has given the industry a boost. In addition to granting the export quota of 4 garments per permanent worker, there is need also to take into consideration the performance during the last 3 years, if the 270 exporters who have dwindled to 46 are to be back in export production. The export markets in US and Europe want a reliable source of supply which Sri Lanka and Mauritius provide and which Tamil Nadu can, if the policy is established on a long term basis. From May 25, all the 1.5 lakh workers in the mills went on strike for increase in basic pay and DA, abolition of contract labour and the demand for 15 days casual leave. On May 26 the State government referred the dispute to a special Industrial Tribunal presided over by a retired High Court judge for adjudication and called on the workers to resume work.

Handloom

In accordance with the overall country agreement referred to earlier, the South Indian Textile Mills Association has rolled back yarn prices for handloom weavers, yarn of 59 counts and below are invoiced at prices that prevailed in October 1978 and for counts between 60 and 89 the reduction is 5 per cent of the April 1979 invoiced prices. The mills are supplying the yarns to the weavers through their respective approved retail dealers and stockists at those prices plus sales tax and transport charges plus a 3 per cent margin for retailers. NTC mills have also implemented the scheme from May 17 through their retail depots in the districts. The cooperative spinning mills are making available the balance of the yarn at the concessional prices to retail consumers through their Salem and Madurai depots after meeting the requirements of primary weavers' societies.

Leather

Leather exports during 1978-79, as noted in the last issue (p. 261) rose to Rs. 330.4 crores, but as reported the export of footwear declined due to consumer resistance, changing fashion and low quality. In this connection, the proposal of the Leather Export Promotion Council to overcome the problem of unfinished or semifinished leather being exported as finished ones through establishing 5 categories is sound — namely (i) wet blue chrome tanned hides and skins, ii) EI

tanned dressed leather, iii) semi chrome or fully chrome or fully vegetable retanned undyed or natural leather, iv) retanned dyed leather and v) finished leather according to generic names. A further help in expanding leather goods exports is India's admission to the International Tanner's Council, London which will enable the Indian Leather industry to up-date its production and marketing techniques, using the feedback from the Council on the availability of raw materials, effluent treatment and control and development of synthetic products which compete with the leather industry.

Private Sector Reports

The 1978 annual report of Lakshmi Machine Works Limited, Coimbatore shows a turnover of Rs. 25 crores, and a net profit of Rs. 206.77 lakhs. Its R & D wing has set up a textile research machinery division including a spinning plane to study the working of the machinery manufactured by the company and process testing different types of cotton, synthetics and blends and the work loads involved. It also reports on its plan for modernisation and expansion.

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IV Education, Science and Health

Unrest in Educational Institutions

During May unrest was reported in 3 educational institutions. Law students at Annamalai University in protest against the detention of some students from the law examination demonstrated, ransacked the office of the Head of the Department and damaged university property Kashmir University students staged a violent demonstration, in sympathy with the execution of Mr. Bhutto in Pakistan leading to the closure of the University. Aligarh University students who came to Delhi to demonstrate against the University Bill because it did not recognise the minority character of the university were attacked outside of Delhi. There were disturbances in the campus with some student deaths, as a result of which the University was closed and its hostel evacuted.

Educational Reform

The Union government presented to Parliament in May the Draft National Policy on Education which: a) defines the aims and objectives of education in rather precise Gandhian and social terms, b) sets forth the priority for elementary education (6-14 age group) and adult education (100 million in age group 15-35) with improvement and vocationalisation of secondary education and stabilisation of higher education, with university degrees not being required for jobs not needing them, c) limiting class room instruction in primary schools to the minimum and not more than 3 hours a day, with no academic year and the time table related to local agricultural seasons, d) relating all stages of education to the needs of society, with socially useful productive work running through it, e) limiting public

examinations to class VIII, class XII and at the end of the undergraduate course, f) switching over all education to the regional languages except primary which will be in the mother tongue, and g) developing a common education system to which the public schools must conform. The Draft is now under debate both in public and Parliament and a number of issues will be further debated such as the time-table for language switching, what the 3 public examinations mean etc. and the results incorporated in the final statement adopted by Parliament. The appropriateness and urgency of the priority to elementary education given by the Draft is brought in the fact reported by the Union Ministry of Education that 74 per cent of children in 8 states, AP, Bihar, Jammu and Kashmir, MP, Orissa, Rajasthan, UP and West Bengal are not enrolled in elementary education. In preparation for recruiting the first + 2 completers and shedding PUC in the colleges from June 1979, the Madras University decided in May a) that colleges with 200 students and over after shedding PUC must have a full time CSS coordinator with not more than 6 hours of teaching so that 12 hours will be available for CSS work, b) granted affiliation to new courses to 106 colleges, c) arranged for some of the surplus staff to go in for the M. Phil course, who will have priority in university department admissions. d) including teaching under the college complex programmes in the teachers work load, not recruiting to fill vacancies but using existing surplus staff and exempting for this appointment of PG professors in PG departments (this will further bring down standards in the University), e) reducing the staff-student ratio, f) no receipt of donations and g) no opening of new colleges or new evening colleges. There is a controversy over the correspondence course B. Ed. programme offered by Annamalai University for which some 13,500 applications have been received. One of the questions is the practical training which will not be available in the course. Moreover, the teacher training qualification is increasingly on the job training affair, with a limited class room or library reading component.

Mass Media

The Union government introduced in May the Prasar Bharati Bill in Parliament which following the Verghese committee report (see vol. VIII, p 293) sets forth legislation to make AIR and TV autonomous. The Bill does not follow the committee recommendation for an Independent Trust but proposes that an independent corporation whose chairman would not be appointed by President on the recommendation of the Chief Justice of Supreme Court, the Chairman of UPSC and Lokpal but in consultation with the Speaker of the Lok Sabha and the Chairman of Rajya Sabha. Another point that the Bill deviates from the committee on autonomy for AIR and TV is that the government is authorised to issue direction not on "question of national security, preservation of public order and other matters of grave public importance" but "for the efficient administration of the Act". The Bill makes no provision for the diversified and decentralized structure that was proposed for a vast country like ours and with a government appointed Complaints Board and two senior secretaries serving on the Board has no guarantee of qualified, independent quality wise professional management. Parliament has sent the Bill to a Joint Select Committee which should look into the departures of the committee recommendations and put as many of them back as possible.

Technical Education

The vocational streams in the + 2 courses has not only drawn about 25 per cent of the Class XI enrolment but seems to be meeting the real and qualitative needs of students and society, reports a recent non-official survey. In one Salem school students have asked for the textile design course to function without stop for the summer vacation. So too the cocoon production course in Dharmapuri schools, the nursing courses in Salem schools, the machinist course in other schools are all functioning well. Now the government must help the schools with adequate equipment The proposal of the state government to run 3½ years M. Sc. courses in non-clinical subjects like bio-chemistry, anatomy and pharmacology in medical colleges is aimed at providing avenues of promotion for the teachers in medical colleges in non-clinical subjects and get a sufficient number of teachers in these subjects for the colleges. This has been approved by the Medical Council of India on the understanding that such persons will be lecturers and will be promoted as professors when they get their Ph D. The teachers have been asking for automatic promotion without the Ph.D qualification. On top of this the government has asked the Council's approval for a 3½ year condensed M.B.B S. course. It is not likely that the Council will approve this proposal.

Science

The National Informatics Centre, New Delhi has installed an indigenous multi-terminal direct data entry system to speed data entry and produce error free computer data at less cost. At present the source documents are converted into machine processable form using a key punch which is slow and mechniacal using consumable punch cards. The new sysem substitutes consumable cards with reusable magnetic tapes and ensures speed and accuracy of data translation from the manual documentation to the records medium. The Planning Research and Action Division, Lucknow reports the development of drumless "Janata" biogas plant at half the cost of conventional plant, usingal ternative construction material and little cement. SERC, Roorkee reports the development of ferro cement gas holder for biogas plants which costs Rs. 1,800 against Rs. 2,332 for the conventional design.

Health

The conference of the Central Council of Health and Central Council of Family Welfare have decided to use the broader definition of primary health care involving improved water supply, environmental sanitation, nutrition with a coordinating mechanism. A perspective plan is to be drafted to ensure primary health care to all by 2000 AD. Medical education is to include health education, and short term courses should be organised for rural health care including revival of the licentiate course in medicine. Also the conference recommended that the NDC decision to transfer a number of central and centrally sponsored health schemes should be reversed with programmes of rural health, communicable diseases, reorientation of medical education, prevention of blindness, the 3 schemes of indigenous systems of medicine and the scheme for combined food and drug laboratories being put back in the central sector. But with the Chief Ministers' decision to make the transfers, the contrary views of the Health Ministers will not be given effect to.

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V Employment

Parliament's Estimates Committee calls attention to the serious dimension of the country's unemployment situation, with the backlog of 20. 6 million unemployed at the end of 1977-78 and the 29.5million who will enter the labour force in the next 5 years. The Plan period is to provide 49.3 million standard persons employment and for this the EGS of Maharashtra and the Antyodaya schemes are reviewed and recommends that the right to work and unemployment assistance set forth in Article 41 of the Constitution should be given statutory recognition and the employment schemes should ensure productive employment. The Union government reports that the Food for Work programme is gathering momentum to the point where it has had to regulate its grant and distribution. For 1979-80, it has earmarked 15 lakh tonnes which will be distributed to 50 per cent on the basis of each state's rural population and 50 per cent on the basis of last year's utilisation of foodgrains. The allocation to each state will take into account the existing work and the work to be started only after existing work is fully provided for. There is to be an evaluation of the programme by September and on that basis allocation for October-March is to be decided. The programme should not be executed through contractors, where it has been done should be immediately discontinued. The food should be distributed at the prescribed minimum rate as otherwise food price may be depressed. The Tamil Nadu government announced in early May that it will operate Rs. 40 crores of food for work schemes with the Union allotment of 20,000 tonnes of rice (against the 65,000 tonnes required). Separate allotments have been made for participating departments like Rural Development, PWD, Forest, Housing Board, Slum Clearance Board, Water Supply and Drainage Board. Maharashtra reports that Rs. 385 crores are provided during VI Plan for its EGS which will generate 962.5 million mandays of employment during the plan period. For 1978-79 Rs. 43.39 crores have been incurred to provide 124.8 million mandays of work, the maximum labour attendance being 0 8 million on 7,907 works in January 1979. Besides 53,000 tonnes of foodgrain have been distributed as wages under the food for work programme. For 1979-80 Rs 65 crores have been allotted to create 162.5 million mandays employment. The Ministry of Labour reports that 21.5 million mandays were lost in 1978 from strikes and lockouts, compared to 25.32 million mandays lost in 1977. The major part of the mandays lost was due to disputes in the public sector and private sector — the former 3.26 million mandays which was 15.2 per cent of the total lost and the latter 18.25 million mandays lost which was 84.8 per cent of the total. Among the states, West Bengal at 9.57 million or 44.5 per cent of the total stood at the top followed by Tamil Nadu in the third place with 2.13 million or 9.9 per cent of the total. Tamil Nadu stood second in number of disputes and workers involved close behind West Bengal with 317 disputes involving 1.78 lakh workers, Tamil Nadu had 376 disputes involving 1.68 lakh workers. On child labour, the Union government has set up a committee to review its causes and problems in this IYC period, UP has 6.7 lakh children under 14 working as cultivators followed by MP (4.76 lakhs), Rajasthan (3.5 lakhs) and AP (3.42 lakhs). As for agricultural child labour, AP is at the top

with 8.11 lakhs and is at the lead again on children working in livestock and forestry (2.45 lakhs) and in the manufacturing and household industries with 1.08 lakh children. Tamil Nadu with 62,703 *children is in the* fourth position. The fourth rural labour indebtedness survey conducted by NSS for the Agricultural Labour Bureau of the Ministry of Labour for 1974-75 shows that the average debt of indebted agricultural labour households rose from Rs. 244 in 1964-65 to Rs. 584 in a decade, with the percentage of the indebted rising from 60.6 *to* 66.4. *Thus during the* 10 *years* of planned development, the numbers and amount of debt increased. The percentage of agricultural labour households who own land and get into debt at 71.0 per cent is smaller than 61.8 per cent of those without land who are in debt. Even *in* Punjab *and Haryana blessed by* the Green Revolution, agricultural labour households indebtedness has soared from Rs. 629 in 1964-65 to Rs. 1,648 in 1974-75. Kerala records an increase of 22 per cent among agricultural labour, Gujarat 18 per cent and Tamil Nadu 16 *per cent. Scheduled castes and tribes* agricultural households were the worst hit, their percentage of incidents of indebted ness going up by 5 and 3 over that of all agricultural labour households. In Pondicherry all scheduled caste and in Punjab all scheduled tribe agricultural labour households were in debt. *In the* 10 *years* the proportion of the loan taken for consumption purposes, 67 per cent, has not changed. Out of the all-India average debt per agricultural labour household of Rs. 584, only Rs. 74 (12.7 per cent) was for productive purpose.

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VI Other Items

Director's Section

The Ninth Interdisciplinary Research Methodology Workshop on "Caste and Class in Indian Rural Society" was held at the Ambalamedu House, Cochin from June 9 to 12. Although 28 Social Scientists from different parts of the country, particularly from the Southern Universities had agreed to participate in the workshop, only 17 were able to be in Cochin. The faculties represented were anthropology, economics, geography, law, management studies, philosophy, public administration and sociology.

The material discussed at the workshop consisted of the following:

1. Papers in the *Economic and Political Weekly,* Annual Number 1979, on Caste and Class.

2. A paper on "Caste and Class in Vannipakkam Village" based on an interdisciplinary field study conducted by a student of anthropology and a student of economics under the supervision of Prof. Subba Reddy, Department or Anthropology, University of Madras, in collaboration with

the Madras Institute of Development Studies.

3. Two review papers, one on "Caste" by Prof. C. M. Abraham, Department of Sociology, Autonomous Post Graduate Centre, Coimbatore and another on "Class" by Dr. Mathew Kurian, Director, Indian Institute for Regional Development Studies, Kottayam.

4. A paper on "Caste, Class Interaction in to-day's West Bengal" by Dr. Biplab Das Gupta and

5. A paper on "Some Methodological Issues in the Study of Caste and Class in the Indian Village/Rural Social Structure by Dr. V. N. Deshpande, Department ot Philosophy, Karnatak University.

The Statement adopted by the workshop appears elsewhere in this issue of the Bulletin and the papers will be included in the Special December issue. The discussions at the Workshop threw up the following issues :

1. In recent years particularly after Independence, many of the older manifestations of caste have disappeared. But caste has assumed new dimension and strength in other spheres of life particularly in the political arena. The oppression and discrimination arising from caste system must be condemned and must be removed from our social life, but not all correlates of castes are necessarily evil.

2. Social scientists differ considerably in the manner in which they conceptualise the Indian rural scene. Some accept caste as the primary social unit in terms of which the Indian society is to be viewed. For others class is the primary category for understanding any social system and the Indian society is no exception even if caste may appear to dominate the Indian social fabric.

3. There was difference of opinion also in terms of whether or not social scientists should be involved in attempts to change society. One view was that social scientists should regard commitments to action and participation in it as an integral part of understanding social realities. On the other hand some who were not against change felt that social scientists do not have the ability to comprehend all aspects of change and that therefore one would have to be extremely careful in committing oneself to any specific course of action.

It may be reasonable to say that of all the research methodology workshops that have been conducted in the past, the Cochin workshop brought out most sharply the interdisciplinary differences in the approach to social problems and what was frequently described as "the social realities". Realising this, the Statement of the Workshop made the following observation :

"The workshop came to a conclusion with an earnest appeal to the social scientists to grasp the limits of rationality in-built in the manner a discipline conceptualises and studies reality. Disciplines also differ in their levels of abstraction, conceptual apparatus and methodological tools used. The participants realised the need to transcend the boundary of their specific discipline for a more adequate and all-round grasp of the social phenomena in a dynamic setting".

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Tamil Sangam and India International Centre

The Delhi Tamil Sangam organised in early May a function to facilitate the 12 teachers from Tamil Nadu and Delhi who had been chosen for the year as outstanding teachers. The occasion was used to review the Draft National Policy on Education with its heavy emphasis on elementary education and its somewhat sparse reference to the role of the teacher—which defect should be corrected in the final revision. A meeting of the Board of Trustees of the India International Centre in mid May reviewed the management situation of the centre and made decisions as to filling the posts of Director and Manager of the Centre.

JEA and NAEP

The Jesuit Educational Society organised a conference on Educational Reconstruction at the Christu Jyothi College, Bangalore in mid May. After a study of the Draft National Policy on Education, the document Education for the People by JP and the NAEP and nonformal education programme, the heads of schools and colleges who comprised the conference made decisions as to moving their educational effort to villages, changing the admission policy in favour of the poor, switching over to the regional languages and making the curriculum more of an agent of social change. A second meeting of the committee on voluntary agencies of the National Adult Education Programme was held at the end of May at which the relation between State governments and voluntary agencies were reviewed. The present relationship of the state governments screening and recommending is to be maintained. Meanwhile the need for stimulating and increasing the number of agencies to meet the doubling of the programme next year was emphasised.

Readers Digest and UNCSTD

A meeting of the Board of Directors of Readers Digest was held in Bombay at the end of May at which a report on the progress of the transfer of the journal to Indian ownership and management was made and reviewed. Discussions centred around future directions of the journal and the issue of a Hindi edition of the journal. A final preparatory meeting for the United Nations Conference on the Application of Science ond Technology for Development was held in mid May at which scientists, economists and management specialists took stock of the Indian positon for the conference. The advice to the delegation emphasised the importance of technology transfer problems and the urgency of applying S & T to our basic needs and employment generation—which is somewhat away from the urban—industrial origin and bias of all S & T.

Rajya Sabha

There were three meetings in the nature of consultative commitees in May. One was the regular consultative committee on education at which the functioning of of the Ministry was reviewed. A second was meeting of Tamil Nadu MPs with the Minister of Industry at which Tamil Nadu industrial deceleration and the need to plan a major central investment in VII Plan at least was emphasised along with problems faced by the salt, coir leather and other industries. A third meeting was that of South Indian MPs with the Minister of Railway at which the Southern Railway problems including the demand for transforming the Tuticorin—Madurai line from metre to broad gauge and making the Tamil Nadu Express a shortened train (as it was previously) with a daily service was urged. Rajya Sabha passed a number of

finance, labour and home ministry bills and referred to the Joint Select Committee the Prasar Bharati Bill.

June Seminar

The paper, "An Approach to Madras Metropolitan Development" by Mr. C. S. Chandran for the June Seminar of the Institute together with a summary of the discussion at the seminar appears as the first article.

Second Article

A Paper "Graduating Futures", appears as the second article.

Third Article

The Statement adopted by the Ninth Interdisciplinary Research Methodology Workshop for Southern Universities appears as the third article.

An Approach to Madras Metropolitan Development

By

C. S. CHANDRAN, MADRAS

Dimensions of the problem

In recent years the problems of Madras City and its neighbourhood have become acute owing to the large and continued increase in population. The population of Madras and enviorns which was less than 1 million in 1931 reached 3.5 million in 1971. The estimated 1978 population for the City and the surrounding areas covered by the Madras Metropolitan Area is 4.6 millions. This represents 20% of the state population and about 25% of the entire urban population in Tamil Nadu. Madras Metropolitan Area consists of Madras City Corporation, 4 Townships, 4 Municipalities, 1 cantonment, 19 Town Panchayats and about 250 villages comprised in 10 Panchayat Unions—its total extent by 1,166.77 sq. km. of which the Madras City Corporation covers 172.42 sq. m. (Table 1).

The population figures for MMA and the city for the years 1978 to 1981 and for 1986 and 1991 are given below :—

Areas	1978	1979	1980	1981	1986	1991
			(figures in lakhs)			
M. M A.	45.88	47.46	49.46	51.52	61.60	73.14
City	34.01	35.33	36.66	38.12	45.67	54.22

According to these demographic projections, the population of MMA will reach 51.52 lakhs by 1981 and 73.14 lakhs by 1991. The implications of this growth are that for the period ending 1986 there will be an average annual addition of 2.00 lakh persons or approximately 37,000 households. This increase in population will intensify the magnitude of the problem particularly in the sectors of housing, traffic and transportation, water supply and more importantly employment and in the provision of social infrastructure like education and health facilities.

The population increase has been due to two factors :

1. The component of natural increase due to excess of births over deaths accounts for 58%.

2. There has been considerable migration into the city and the net inflow accounts for 42%.

Main Problems of the Metropolitan Area

We may now identify the main sectors that require special attention in a metropolitan area like Madras.

I. **Housing and Slum Clearance**
   - A. Housing for the economically viable group
   - B. Housing for the economically weaker sections
   - C. Slum rehousing

II. **Traffic and Transportation**
   - A. Traffic Management
   - B. Road Infrastructure
   - C. Public Transport
     - (i) Road
     - (ii) Roadways

III. **Water Supply and Sewerage**
   - A. Water Supply
   - B. Sewerage
   - C. Storm water drainage

IV. **Social Infrastructure**
   - A. Educational facilities
   - B. Health facilities

V. **Urban Employment**

Some Constraints on Metropolitan Planning

Before we go into a sector wise analysis of these problems let us look at some of the basic constraints involved in metropolitan planning in sufficiently large scale to improve the living conditions and to ensure controlled growth according to a given model.

First of all there are extremely complex forces at work in any urban area and these can be influenced by planning only to a limited extent. The socio-economic forces in the life of a city in our type of economy are too powerful to be entirely controlled and regulated artificially. Even the most efficient implementation of urban development projects can at most stimulate economic activity in some measure and give a fillip to growth forces and industrialisation. But the interaction of economic forces may be such that we may not be able to comprehend fully how thousands of human beings would ultimately respond to a given model This can be illustrated by a concrete example from our experience in Mardas. Street after street in traditionally residential areas have gone over to shopping and trading activities. Take Chintadripet. The planner had planned something different. He had marked the whole street residential with a few corner shops. But somehow the whole plan has gone awry and the entire character of the street changed.

Secondly in the existing scheme of things, the economically stable groups have a disproportionately greater hold on the limited infrastructure facilities and resources available and the economically weaker sections find themselves out of depths in this competive urban world. In Madras as perhaps in any other major city in India, the affluent sections could be straightaway identified by the localities in which they live. Their access to some of the urban services including the best water supply, sewerage and roads may be because of their ability to force the civic authorities to act. As we go down the scale to the middle income group and the lower Income group, access to urban infrastructure decreases Nevertheless the factors that make the access possible are the same. Then we come to the slum people who have practically no access to urban amenities at all. Their only strength in fact, is their voting power and because of the voting power they are wooed by all political parties just prior to the

election and then we find a few stand pipes provided in the areas for drinking water and a few street lights hurriedly erected.

The third constraint is that as things stand, we do not have a clean slate to start from. The city has grown and developed in some form or other and whatever be our intentions, we cannot overhaul it the way we like. Ideally, we might prefer the economically better sections of the population to live in suburbs and commute to the Central Business areas in their own vehicles and the weaker sections who have no private transports to live nearer the business areas. This however is not possible because it is precisely the well-to-do segment of the city population who can afford to purchase land or rent the houses nearer the Central City areas. In our economic system the poor can only afford to stay out in the suburbs and commute to the city in the public transports or else choose to be condemned to the slums.

From the above analysis it is possible to draw two inferences:

1. Any plan for a balanced and orderly development of a metropolitan area like Madras should lay emphasis on a significant and sizeable shift of infrastructure facilities from the affluent sections to the weaker sections.

2. Secondly such a plan should involve a multi-disciplinary approach. Too often our urban development plans have collapsed because such plans were conceived and executed purely in engineering terms with too little understanding of the economic, sociological and even psychological dimensions of urban growth.

Once these facts are realised, it should be fairly obvious that metropolitan development involves creation of the appropriate institutions and the necessary mechanism to co-ordinate the several components of the city development such as housing, transportation, water supply, employment, health, education etc. Let us briefly look at the set-up in Madras. The Madras Metropolitan Development Authority has been assigned the functions to plan, co-ordinate, regulate and monitor the overall pattern of growth and development whereas the actual implementation of a particular project is handled by the agency most suited for the purpose such as Tamil Nadu Housing Board, Tamil Nadu Slum Clearance Board, Madras Metropolitan Water Supply and Sewerage Board, Madras Corporation, Pallavan Transport Corporation etc.

MMDA's Overall Strategy

There are three basic elements in the strategy planned by MMDA and being implemented by the various agencies.

1. Reduce the migration of people into the MMA by developing a string of Satellite Towns at a reasonable distance from the city. Each of the satellite towns is designed to accomodate 1,00,000 people.

2. To consolidate and strengthen existing urban nodes with in MMA, each designed for a population of 200 to 300 thousand.

3. Restructuring the city to obtain a more uniform and rational development with the help of an integrated Madras Urban Development Project which will be assisted by the World Bank.

Regarding the first of these, the first satellite town is being established at

Maraimalai Nagar, 43 km. south of Madras between *Tambaram and Chingleput.* It is being developed into a full fledged town with its own employment centres, housing, commercial centre and other infrastructure facilities.

The past experience in relation to the development of satellite towns is not wholly satisfactory. In fact no systematic attempt has been made to find out why, for instance, thousands of people in Calcutta prefer the slums in the city to the better housing and other facilities of Kalyani.

The 'urban node' approach is better conceived and the first urban node at Manali is being developed as an integrated residential complex to cater to the needs of the people employed in the industries in Ennore, Tiruvottiyur and Manali. Five more such urban nodes are planned at Ambattur, Avadi, Alandur, Trivellore and Minjur.

But it is the third element, that is, the Madras Urban Development Project that forms the cornerstone of MMDA's strategy. This project has several components.

1. Develop sites and services for economically weaker sections
2. Slum improvement
3. Encourage small scale cottage industries to provide local employment particularly in slum areas
4. Improve roads and develop transport
5. Increase water supply
6. Establish centres for maternal and child health

On the face of it, the Madras Urban Development Project appears to be an integrated approach. However to find out how it has worked in finding reasonable solutions to the problems of Madras and its environments we need a quick look into the size and nature of the task involved in each sector described earlier.

Housing

We have seen earlier that according to the demographic projections available there will be an addition of 37,000 households per year in Madras Metropolitan Area. To accommodate these new households and also to replace old houses an estimated 50,000 houses will have to be built every year. Of these an estimated 20,000 will have to be for the economically weaker sections and anthor 22,000 for low income groups. A more gigantic problem involves the improvement in the living conditions of the 1.3 million people or *approximately 2,60,000 households* who live in slums scattered all over the city area.

The two agencies set up by the Government to handle the housing programme in the MMA are the Tamil Nadu Housing Board and the Tamil Nadu *Slum Clearance* Board. These two agencies have together been contributing only a net addition of 5,000 houses per year and it is estimated that another 3,000 dwellings are being added every year by private real estate development. This means that the *backlog of dwelling units increases* every year by an extra 28-29,000 without taking into account the deterioration of old houses.

What is more important than this statistics of backlog is the very approach involved in the overall housing policy. There is an implicit belief here that the slum people and other sections of the society have to be approached at two

levels and from two angles. This is inherent in the creation of two agencies. This cannot be treated just as an institutional dichotomy but represents a more fundamental cleavage in our thinking. From a socio-economic point of view this has far reaching implications in the development of a city.

Once we believe that slum people require different kinds of housing (the issue here is not just of low cost housing because a large segment of economically weaker sections in the city outside the slum areas can also benefit from any low cost housing scheme) we would also come to believe that they require different kinds of schooling, different kinds of health care facilities and indeed different kinds of cultural environments. In fact the slums contain a cross section of the city's working population and there is nothing to distinguish them from the rest of the society either in terms of education or vocation. It is only their income levels that set them apart and to treat them as a separate segment, on this ground, can do incalculable harm to the city's balanced development.

Secondly, agencies like TNHB and TNSCB should have effective R & D operations and shouldbe continuously experimenting with new ideas in the changing metropolitan environments. Unfortunately TNHB and to a lesser extent TNSCB have turned out to be essentially construction agencies.

For instance, a model house for slum dwellers constructed by TNSCB costs Rs, 4,500 for a plinth area of 220 sq.m., an amount beyond the purchasing power of the majority of the people. Since then there has been further escalation in the costs of cement, steel, bricks, etc. The question now is whether we should not experiment with traditional housing material which have stood the test of time like bamboo, wood and mud. The only improvement that may be required is to make these materials durable, water-proof and fire-proof. There needs to be intensive research in this field. But it can hardly be gainsaid that costs cannot be brought below a certain level and even that level may be beyond the reach of the majority of the poor.

Slum Improvements

According to estimates made by MMDA, the city of Madras has 1,202 slums with a population of 1.2 to 1.3 million which works out approximately to 1/3 of the city's population. These are staggering figures. But while the figures are often publicised there does not appear to be any intelligent understanding of what a slum is.

As we saw earlier a close look at any slum will show that it represents virtually the entire working class of the city. There are mill workers, carpenters, blacksmiths, vegetable vendors, taxi drivers, rickshaw-pullers, teachers, typists and domestic servants. The list seems endless. In that list there is also a large segment of self employed people. We can now ask a straightforward question. Can the city manage without all these services provided by these slum people? The answer is clear. Without them, life in the metropolis would come to a grinding halt.

The MMDA's approach to slum improvement as part of World Bank assisted Madras Urban Development Project has three vital components :

1. The first is the realisation that the slum dweller will have no stake, no interest in the development of the land he occupies unless the land belongs to him. Ownership leads to a number

of positive results. It enables him to construct his house in his own way with his own resources.

2. The second element is cost recovery. Although land may have to be given free or at a subsidised rate, the actual investments in improvement should be recovered from the slum dwellers at a reasonable rate of interest over a long period.

3. Thirdly it is conceived essentially as a low cost solution and since the costs are recoverable, the scheme is replicable.

Under the World Bank programme MMDA is trying this scheme in 85 slums covering about 27,000 households. In return for the benefits that this slum dweller receives, he pays Rs. 8/=per month for 20 years after which the title of the land passes on to him.

Two observations can be made on this programme. First of all the success of the programme will depend upon the extent of the active participation of the slum dwellers themselves in the programmes. It should be obvious that the slums contain a lot of educated manpower and this could be mobilized to be an effective instrument particularly in the field of health and education viz., spreading literacy and co-ordinating an effective family welfare programme. Such a programme would be a lot more acceptable to the slum dweller than the solutions imposed from outside.

Secondly the success of any slum improvement scheme would depend in the long run on creating a reasonable level of income to the slum dwellers In this sense employment creation could be regarded as the cornerstone of any slum programme. Low cost solution may be ideal, but it is doubtful whether cost can be brought below a certain level especially in the conditions of escalating prices all round.

Traffic and Transportation

It is the city's road net work that remains as the mainstay of its transportation system. Buses carry nearly 85% of the mass transit trips or about 17 lakh passengers per day.

The balance of passengers are carried in the suburban railway system. At present there are three railway lines carrying about 4.35 lakh commuters daily. They are :

1. Madras Beach — Tambaram
2. Madras Central — Trivellore
3. Madras Central — Gummidipundi

Until recently the Madras Beach-Tambaram was the only electrified section in the metropolitan area. In April this year electric traction has been introduced in both the broad gauge sections Though electrification of the two suburban lines north of Central Station will ease the congestion in the industrial areas in the north of Madras such as Ambattur, Avadi, Trivellore, and Ennore, the congestion in the traffic towards south will continue. A working group set up by the Planning Commission has recommended a rapid railway transit system connecting Madras Beach to Kasturbanagar and this is expected to bear the brunt of the commuter movement from the Central Business areas to Mylapore, Adyar and other southern residential areas.

In the present complex traffic situation in Madras it is difficult to suggest any radical solution that would fully meet the total transport requirements of the city and its economy. A few suggestions could, however, be made.

1. Optimise the movement capacity of the suburban rail system by converting the existing level crossings into overbridges or subways. This should also make it possible to increase the frequency of the train movements.

2. Optimise the vehicle population in the city and also the carrying capacity at least during the peak hours. According to the structure plan for Madras Metropolitan Area, Madras city had in 1977, 24,000 private cars whereas it had only 4,700 taxis and more surprisingly only 1,700 autorickshaws. This seems entirely lopsided in a city where majority of the people will have to depend upon the public hired vehicles sometime or the other. There is no reason why the fleet of autorickshaws and to a lesser extent taxis should not be expanded. Along with this officially permitted shared taxis should be allowed to ply between suburbs and the Central Business areas at fixed rates. This system is being very successfully practised in Calcutta.

3. Thirdly it is possible to adopt a segmented approach to commuter traffic by introducing a number of mini buses with a higher fare structure for those who can afford to pay more than the bus fares but not quite able to have their own private vehicles. Such a segmented approach will take the pressure of a considerable number of office going people off the city bus service.

4. At present lorry traffic is banned from Central Business areas during peak hours. Such a ban should cover private cars also which could then be parked in off street parking zones. Such a measure will optimise the use of the main thoroughfares in the central business areas. It is also worth observing that according to the Madras Area Transportation Study Unit report bicycles constitute 55% of city vehicles passing the inner cordons of the city.

Provision of separate cycle paths should further help to optimise the use of the main thoroughfares in the city.

These measures along with the wider steps taken to reduce the inflow of people into the MMA should hopefully bring the traffic situation within manageable limits.

Water Supply and Drainage

Only Madras City and to a limited extent Tambaram and Tiruvottiyur Municipalities have protected water supply systems. The core of the system was designed for a population of 6 lakhs. The city is serviced with 1,10,000 house connections serving a population of 16.5 lakhs and 6,872 stand pipes serving a population of 13.0 lakhs mostly living in the slums. This works out to one house connection for three households and one stand pipe for 35 households. Only 75% of the city area is served by the sewage system but there are extensive Urban areas outside the city that are not served. It would not be wrong to say that the 13 lakh slum dwellers practically do not use the sewerage system.

While 43% of the city population is hardly served by the sewerage system, 100% of the population outside the city are not served at all. The Madras Metropolitan Water Supply and Sewerage Board is at present in the process of implementing an 'immediate works programme' — a programme which seems at best a patch work operation — as part of the Madras Urban Development Project.

Social Facilities

The situation relating to the social infrastructure within MMA specially in the sectors of education and health presents an even more depressing picture. In fact till recently urban planning efforts showed very little concern for the planning and control of these sectors. Metropolitan Planning was essentially thought to be concerned with the provision of physical infrastructure like housing, transportation and water supply. In recent years there has been considerable change in this attitude. However, urban planners find it difficult to grapple with the forces that operate in these fields. Over the years the social facilities in the city have developed with a definite and persistent bias towards the affluent sections. In fact in Madras as in any other city the best schools are patronised by the rich and the influential and it is through these institutions that the elite assure themselves an early control in the economic and administrative system of the city and the state. The economically weaker sections of the city have always to send their children to the inferior schools and thereby they are relegated to the backside right from the beginning in this competitive world.

Even in pure quantitative terms, the expansion of educational facilities has been totally inadequate and figures available with the Directorate of School Education reveal that the resources deployed in school education have been virtually stagnant over the years. For instance, there has been understandably a steady increase of school-going population over the years, the total number of students having increased from 4,67,853 in 1973-74 to 5,02,466 in 1977-78 showing an absolute increase of 34,613 over a period of 4 years viz., an annual average increase of 8,653 per year. Against this the number of teachers have actually decreased from 13,631 in 1973-74 to 13,611 in 1977-78.

Let us also see what has happened in the Primary School sector. Here the number of entrants have increased from 1,41,515 in 1973-74 to 1,52,156 in 1977-78 viz., an increase of 10,641. Against this the number of primary schools have increased by an insignificant 8 in 4 years from 336 in 1973-74 to 344 in 1977-78. So much for the emphasis on mass literacy.

In discussing the health care facilities that should be made available as part of a planned metropolitan development programme it is necessary to emphasise that informed medical opinion feels that more than two thirds of the diseases are caused by malnutrition, contaminated water supply and simple lack of health information. In a recent analysis on this subject Dr. B. Ramamurthy observed "A great majority of illness in our country are caused by lack of hygiene, malnutrition, over-population and contaminated water. These have to be tackled not by creating more medical men but by health propaganda and health education".

Communicable diseases can be prevented by a simple scheme of immunization. Unfortunately even this reaches only 7% of the children in the city below the age of 6. What is required is a simple operational programme to educate the vast number of people particularly those living in the slum areas in the fundamental aspects of health, education and family planning. Such a scheme would succeed only if it draws heavily on the manpower available within the slum areas themselves and by giving them necessary training in the basic elements of health care and education.

Employment

It is not difficult to recognise the fact that any development programme designed to help the weaker sections based on external assistance and improved urban services has to be necessarily a short term affair and in the long run efforts have to be made to upgrade the income levels of these sections to provide them with acceptable living standards.

A definite, positive and viable employment policy therefore becomes the cornerstone of metropolitan planning.

The Operation Research Group is currently carrying out a study of the economic base of MMA. Some of the facts brought out by this study are revealing :

1. In terms of numbers the magnitude of poverty is alarming. Estimates of number of people below poverty line for 1978 are as follows:

MMA	17 lakhs
MMC	1.28 lakhs

2. For MMA as a whole estimates of unemployment range between 1.4 to 2 lakhs. These figures reveal one significant fact i.e., a large number of people who can be described as employed are below the poverty line. What it implies is that employment itself does not guarantee freedom from poverty. This fits in well with the growth pattern of the economy of Madras, where at least 50% and at most 70% of the total employment is accounted for by the small, unorganised sector, a large part of which is regarded by ORG as synonymous with the informal sector. The contribution of the informal sector to income is much smaller than its contribution to employment.

3. Functions carried out by the unorganised sector are often not basic to the economy. They are unprofitable lines of occupation with very little capital investment or sophistication.

4. In the absence of substantial growth in the organised sector, particularly large and medium size manufacturing units, commercial trades and services, the chances are that the economy of Madras will degenerate into an economy with a predominance of low income occupation.

From the foregoing observations it should be clear that an effective employment policy should occupy a pivotal status in Madras Metropolitan Planning. This involves the creation of sufficient jobs to absorb the present backlog of unemployed people plus another 30,000 jobs per year to take care of the new entrants to the labour market. Besides the large number of people who are marginally employed will have to be assisted to upgrade their income to an acceptable level. There is nothing to suggest that in the present package of programmes formulated and being implemented by MMDA and its associated agencies they are anywhere near this stupendous task.

The Present Strategy - An Assessment

In assessing the overall strategy adopted by MMDA and its associated agencies, two questions need to be asked:

1. Does it, even in quantitative terms go far enough to solve the problems of Madras Metropolitan Area?

2. Does the package of projects optimise the benefits that accrue to the major segment of the population which can be described as "economically weaker sections"?

In answering the first question, we have to keep in mind that the population of MMA increases by approximately 2,00,000, per year of which the component of migration will be to the extent of 85,000. If the MMDA's strategy is to effectively stem the tide of migration into city by developing satellite towns, it would mean that one satellite town to accommodate a populaticn of 1 lakh will have to be developed every year whereas MMDA at present plans to develop just one town spread over 5 to 6 years. It is therefore clear that the present strategy to develop satellite towns as a means of reducing the inflow of the people into the city needs to be reviewed.

The targets fixed for the various components of the Urban Development Project also appear to fall far below the city's requirements. The slum improvement scheme covers just 85 slums with about 27,000 households whereas a staggering 2.6 lakh households covering almost one-third of the city's population live in slums In housing we have seen that the Governmental Agencies and Private Real Estate Operators add only about 8,000 dwellings per year against an annual requirement of 30 to 40,000. The employment component will create, even by the optimistic estimates, about 20,000 jobs per year whereas there is an annual addition of 30,000 people to the labour market besides the backlog of 1.4 to 2 lakhs alredy unemployed. In education and health the shortfall would be even more glaring and there does not appear to be even the pretence of achieving anything very significant. It would therefore be seen that at the present pace of development work in MMA we would have at the end of the century a significantly poorer if not an infinitely worse Madras than we have at present. The inescapable conclusion is that even if the present set of measures and schemes are much more than symbolic, they do not amount to anything very substantial in solving the city's overwhelming problems.

A weakness of the MMDA's strategy so far has been that it lacked an effective conceptual framework for income and employment generation for the vast multitude of people living below the poverty line. Implicit in MMDA's approach is a belief that an effective solution to the appalling conditions in which vast segments of the city's population live can be found without significantly disturbing the existing socio-economic structure. It is this assumption that seems to be the weakest link in MMDA's total approach, but one is given to understand that the MMDA is now paying attention to this aspect.

Some Broad Suggestions for an Alternative Approach

The essential inference to be drawn from the above analysis is that an approach to Madras Metropolitan Development with its central emphasis on helping the Urban poor to find satisfactory living standards should involve restructuring the city's economy and not just tinkering with it. A programme of this nature should be much broader in its sweep and much faster in its pace of implementation. It is suggested that such a programme will have the following elements:

1. A massive programme of employment generation will be planned by mobilising a City Reconstruction Force on the lines of the National Reconstruction Army that has been frequently discussed. In fact the best place to experiment such an Army is in a metropolitan area because there will be a large concentration of unemployed people here and also a

sizeable amount of work to be done. There will also be no significant problems of logistics or organisation. Moreover most of the work involved in the reconstruction of a city like slum improvement, road construction, house building and even programmes like spreading mass literacy and primary health care are essentially labour intensive in nature with very little to worry about problems of technology. A programme of this size would draw heavily on the weaker sections not only for the unskilled labour but also for the relatively more sophisticated jobs involved in the literacy and health care programmes. The slums in Madras contain a great deal of educated manpower, who can be trained to be effective instruments to spread literacy and health education.

As an experiment a Reconstruction Force of 50,000 people could be mobilised in the initial stage. The question that will come up is whether the necessary financial resources for organising such a reconstruction Army can be mobilised. There is no doubt that this is within the realm of possibility. 46% of the sales tax collected for the whole state come from Madras City and 49% of the Bank Deposits in the state also fall within the boundaries of the Madras Municipal Corporation. A detailed study of the Corporation finance will reveal that there is considerable scope for expanding its tax base and also for improving the collection.

Once a massive programme of this dimension is under way it will create on the one hand sufficient demand for materials, tools and equipment and on the other hand the increased income of the workers would result in an increased demand for basic wage goods all of which would quicken the pace of Urban Industrialisation and avenues of further employment.

2. The city's industrial base will be strengthened by preparing a comprehensive programme for the development of its small industries and also to integrate the informal sector more fully with the mainstream of the city's economy. In fact a close study of the small scale industries in India particularly the factors that lead to the stagnation and mortality of a vast number of them would reveal one glaring fact i. e. it is the inadequate flow of managerial input that emerges as the single most important cause for their failings. In fact very little attention has been paid in India to develop a cadre of managerial expertise to take care of this vital area. It is unfortunate that none of our three all-India management institutes have thought it necessary to develop carefully organised training programmes for this important sector. It may be possible to set up such an Institute in Madras with the very special purpose of turning out about 200 to 300 managers every year rigorously trained in the management of small scale industries. Their services should be made available to the small scale sector and the Government should be willing to subsidise such industries who hire their services to the extent of their remuneration either in full or in part.

3. It is suggested that strengthening the economic base of the small towns in and around Madras, more particularly those in Chingleput District

as an alternative to the satellite town approach. Since 80% of the migration to the city originates from Chingleput District consolidating the District's economic structure should considerably cut down the migration into the city.

4. Development of Social Infrastructure like education and health will occupy a significantly more important position in the city's planning efforts than they have at present. Schools will be organised on a neighbourhood basis and courses will be largely vocationalised to take care of the city's reconstruction programme. Even in the case of physical infrastructure development, the affluent areas should wait for their increased amenities until slums and other depressed areas are brought to a certain minimum level.

5. There is a great deal of resources available within the voluntary organisations functioning in the city and so far no efforts have been made to effectively co-ordinate their activities. Very often, the work of voluntary organisations overlap MMDA's own operations or those of other voluntary organisations. MMDA could perhaps open a special cell to co-ordinate the activities of these organisations so that the city gains the maximum benefit from their operations.

In the final analysis, an effective solution to the overwhelming problems of Madras and its neighbourhood can be found only through an approach that would bring the 40% of its population that live below the poverty line to acceptable living conditions.

TABLE — 1

Madras Metropolitan Area : Constituent Units

Sl. No.	Area	Status	Extent Sq. Km.	Population 1971
1.	Madras City	Corporation	128.83	1,469,449
2.	Additional areas added in 1978		43.59	107,129
	City (1978)		172.42	2,576,578
3.	Tiruvottiyur	Municipality	21.27	82,853
4.	Kathivakkam	Township	2.47	2,138
5.	Madhavaram	Township	17.41	18,721
6.	Ambattur	Township	35.42	45,535
7.	Avadi	Township	25.62	77,413
8.	Alandur	Municipality	19.40	65,039
9.	St. Thomas Mount	Cantonment	11.18	27,503
10.	Pallavapuram	Municipality	18.71	51,374
11.	Tambaram	Municipality	22.10	58,805
	Urban (Municipal)		173.58	429,381
12.	Town Panchayats (19)		116.91	79,752
13.	Village Panchayats		703.85	390,480
	Semi Urban & Rural Areas		820.76	470,232
	TOTAL		1166.76	3,476,191

TABLE — 2

Basic Facts about Madras

Sl. No.	Details	Madras Metropolitan Area	City
1.	Extent (sq. km.) (1977)	1166.76	172.42
2.	Population (.000) : 1978 estimate	4588	3401
3.	Annual per capita income (Rs.) (1971)	855	906
4.	Income Structure (1974)		
	Less than Rs. 350 p. m. (%)	N. A.	72.2
	Between Rs. 351-900 p. m. (%)	N. A.	21.7
	Above Rs. 900 p. m. (%)	N. A.	6.1
5.	No. of households (1971)	6,49,265	4,44,788
6.	Manufacturing establishments (1971)		
	No. of registered establishments	1,431*	852
	Employment in registered establishments	97,386*	58,941
	No. of unregistered establishments	19,904*	12,517
	Employment in unregistered establishments	50,236*	33,962
	* City and Chingelput District.		
7.	Commuters per day (.000) (1977)		
	By train	400	
	By bus	1,700	
8.	Suburban Trains per day (No.) (1977)	258	
9.	Bus Fleet (P. T. C.) (NO.)	1,466	

June Seminar

Summary of Discussion

The paper "An Approach to Madras Metropolitan Development" was presented by Mr.C.S.Chandran at the Seminar on Thursday, June, 28, 1979 at the Institute. Prof. T.S.Venkataswami chaired the seminar.

Introducing the paper, the Chairman remarked that it was very informative and clearly brought out the inadequacy of efforts being made towards the development of the metropolis in general and slum clearance in particular. He stated that the author's analysis ultimately pointed towards the prevalence of widespread poverty in the city and its environs.

The author then presented a broad outline of his paper. After reviewing the magnitude of the population problem in Madras city as well as Madras Metropolitan Area (MMA), he proceeded to make a sector-wise analysis of the effectiveness of plans developed by MMDA (Madras Metropolitan Development Authority). He observed that in the area of housing and slum clearance, the measures adopted were extremely inadequate, thus leaving a large backlog to be cleared A major weakness of the Housing Board, he felt, was the absence of R&D operations and failure to consult expert sociologists. Further, he offered some suggestions to counter the complex traffic conditions in Madras. The water supply and sewerage scene too was observed to be unsatisfactory. The author noted that only since recent years there was awareness of the need for planning in the sectors Health, Education and other social facilities.

The author concluded that on the whole the measures undertaken so far by MMDA and its associated agencies for Madras metropolitan development had fallen far short of needs. Considerable stress was therefore laid by him on reformulating the whole approach to metropolitan planning and in particular to the development of satellite towns. Some of the recommendations proposed by the author were *mobilisation of a City Reconstruction Force*, development of managerial expertise and stengthening the towns around Madras. Finally, he observed that an effective employment policy was the "cornerstone of metropolitan planning".

Some of the principal issues that arose in the discussion following the presentation of the paper were: the approach to metropolitan development, the role of MMDA and the effectiveness of its programmes, the slum problem and problems relating to self-employment and transportation.

A participant observed that the whole approach to metropolitan development called for reorientation. He stated that a city's problems were generally looked

upon as spatial problems with civic amenities superimposed upon it, thereby overlooking the economic dynamics underlying its growth. Moreover, the urban development planning strategy followed in India, which is borrowed from the West, assumes a far greater differentiation of economic activities than what actually obtains in this country. One instance is the employer-employee relationship: the existence of a large group of self-employed entrepreneurs does not permit this type of differentiation. The second instance is the differentiation between dwelling and occupation. It was therefore felt that planners should look into the dynamics of the city's growth and treat it as an economic rather than spatial entity.

On the issue of approach of the MMDA to Madras metropolitan development, two main aspects were discussed: the development of satellite towns and slum clearance. Some participants shared the author's view that atleast one satellite town would have to be developed each year if the MMDA's strategy is to curb migration into the city by developing satellite towns. It was felt that the geographical distance of these satellite towns from Madras city would discourage movement into the city. However, an important query that was posed here pertained to the character that would be given to the satellite towns. It was stressed that the development of satellite towns merely for providing housing would not relieve the influx into the city. More important was to create employment opportunities there. One of the representatives of MMDA who was present at the seminar clarified that the MMDA's objective was precisely to provide housing as well as employment opportunities in the satellite towns. However, the satellite town at Manali, it was pointed out, catered only to housing needs.

One participant introduced a new angle to the problem of slums. He disagreed with the attitude that slums were shameful. He observed that when the population rose in excess of employment opportunities, the excess population employed each other. Such activities were not covered under the regular network of employment. This population lived and operated from the same place. It was therefore felt that atleast from the standpoint of employment, slums could not be avoided. The participant further observed that slums were well organised communities. Owing to the fact that slums were unavoidable, the best immediate solution would be to "take care" of them and try to build "better slums" by providing water, sanitation, education and other basic facilities. Referring to the author's recommendation in his paper that cheaper materials ought to be used in view of shortages of construction materials and their high cost, he pointed out this was exactly what had been done by the slum dwellers.

Another participant observed that financial difficulties involved in extending water supply and sewerage facilities to all slums could be overcome by breaking down the programme into smaller components. An important factor which should be kept in mind, he felt, was to build well spaced out buildings.

There was strong reaction to the view of 'caring' for slums. The author reiterated that slums had to be viewed not merely in relation to the occupation factor but more importantly, to income. Another member viewed provision of sanitation facilities to slums rather than erecting new buildings as the most immediate need.

During the course of the discussion, the relationship between MMDA and other agencies was examined. It was

noted that the MMDA was the planning authority and the Corporation and Housing Board were the executive bodies. When a question was raised as to why the MMDA had not planned to develop the towns surrounding Madras, it was stated that the portfolio of planning for towns rested with the regional planners.

One frank opinion on the role currently being played by MMDA was that its efforts were no where near meeting the needs of the metropolis. It was felt that the problems of Madras city were too complex to be tackled by any agency and at best only a few improvements could be effected. It was however stated that MMDA was making a sincere attempt to reach the deserving people i e., the poor. It was again stressed that the creation of employment for the unemployed and raising their incomes alone could lift the city's economy out of stagnation.

Representatives of the MMDA who were present at the seminar clarified that the organisation's basic approach was to improve the environment by providing the infrastructure required. It was stated that among other things several clinics for women and children had already been opened. Three types of houses costing between Rs. 2,000 and Rs. 3,000 were being built. It was pointed out that MMDA was experimenting with many new techniques.

The discussion briefly touched upon the local transportation problem. One view was that people commuting from long distances should be persuaded to live closer to their workspot in order to reduce the pressure on the transportation system. For this purpose it was suggested that transfers and exchange of properties should be made easier. It was thought by another member that an improved suburban railway service was the key to the transport problem.

Further, it was observed by one participant that the idea of self employment had been misconceived by many. Self-employed entrepreneurs, he also added, were faced by accounting problems and scarcity of raw materials. He therefore agreed with the author's recommendation to set up an institute for management training specially for small entrepreneurs. However, the practicability of the author's suggestion to mobilise a reconstruction force was doubted. Emphasis was placed on the need for a sensitive assessment of the lower strata of population and formulating programmes for them on a priority basis.

Finally, it was noted that many of the problems discussed above perhaps arose because of the general decline in the industrial performance of Tamil Nadu in recent years. The discussion therefore concluded on the note that the development of the Madras metropolitan area should be viewed not in isolation but in relation to the economy of the state and country as a whole.

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Felicitations

My first task is a pleasant.one. It is to offer my warm congratulations to all of you graduating at this Convocation of the Osmania University along with wishes for a successful future career as you go forth into the world of work, or of further study to earn your living or to further prepare yourselves to do so and serve the country in some one of its many areas of need. Today is a happy and auspicious day for all of you. It represents the crowning of the years of study, learning and research that you have been engaged in, a crowning that will now issue in varied and various benefits that you are entitled to. I would like to spend a few moments with you in reflecting over your futures.

Economy : Primary Industry

To start with, our economy is in good shape and offers us a number of opportunities of further development. On the agricultural front, we have had three years of unusually good harvests, which raises the possibility that our agriculture is no longer just a gamble in the rains, as one of our former finance ministers described it, that it is now beginning to respond to the new technologies — in assured water supply, high yielding seeds, fertilisers as well as improved cropping patterns and land use that have been invested in it over the last decade and a half. But this rather striking improvement in our farm output in both food and commercial crops — has given rise to a number of second and third generation problems that my generation is leaving as a legacy to you and your generation to deal with. A first problem is that my generation has been so used to dealing with shortages in foodgrains production, that the whole economy and its related institutions — procurement, levy, food zones, support prices, subsidies, public distribution and large scale imports — were developed to deal with an economy of shortages. Now we seem to be lost and incapable of dealing with our economy of surpluses. These surpluses are arising not only in foodgrains, but also in sugarcane, in cotton and in jute. It is no solution to this problem to just build a bigger and bigger buffer — a 20 million foodgrain buffer, a 5 lakh tonne sugar buffer, and a similar 15 lakh bale cotton buffer or a 5 lakh bale jute buffer. Buffers are meant to even out supply fluctuations, on the assumption that there is a demand for the product : but our demand is static, as the low off-take from our fair price shops and the inelastic foodgrains demand of the rich show. Equally if, as seems likely, that with the application of the new technologies, we have left behind the period of scarcities, holding large stocks will expose them to various forms of wastage and deterioration It is estimated that some 10 per cent of our foodgrains production

* Extract from the Convocation Address delivered by Malcolm S. Adiseshiah at the Osmania University Annual Convocation, Hyderabad, April 19, 1979

which is worth Rs. 350 crores are lost annually through poor storage. Nor is exporting the surpluses to other countries, as we have begun doing with wheat, rice, sugar and cotton, a responsible answer: in fact it is a surprising and somewhat scandalous way out for a country where the majority of its people — some 300 million men, women and children—are living below the poverty line — that is, living without the necessary minium to feed, clothe and house themselves. The real answer to the problem of surpluses which, in a poverty laden country is a bit of a mirage, is to widen the market for all these basic necessities, to develop a system which will put purchasing power in the hands of the deprived masses, which means that your generation is called upon — to devise an institutional structure, particularly of property and assets relationship, whereby the fruits of the new technology will be accessible to all our people.

Economy : Secondary Industry

(Another area where we are doing well is in the infrastructure to the manufacturing sector. We have a well developing capital goods industry that meets our needs for iron and steel, for chemicals, heavy machinery and a growing capability in our infrastructure of power generation, including coal, electricity, oil and gas, and nuclear and bioenergy, road, rail and water transportation networks and a sound and efficient labour force, supplementing, enriching and expanding as human capital the limited physical capital resources available to us. And yet the basic consumers goods which our people need, such as edible oils, soap, clothing, potable water, housing materials and equipment are not available to the mass of our villagers.) We have tried to produce these through what is called our organised sector — our mills, factories and firms — some of them multinational and others national and sub-national — and the result has been that their quantities have been limited and inadequate, and their prices beyond the purchasing ability of the common man. Here there is a very important truth that Gandhiji, who was no economist, but who had deeper and more farsighted insights than those of many of the social scientists of my generation, advocated and which has not been acted upon. Gandhiji held that the only way in which the basic consumers goods that are needed by the masses of the people can be produced and made available to them was by the people themselves, organising themselves and producing these necessities that they needed. This was the main message of swadeshi — khadi and other village industry products such as paper, gur, etc. It is now for your generation to translate this truth, which 30 years of our independent existence have proved to be only too true — into a programme of action. A start is being made in the current plan 1978-83 by reserving these items, of what I have called basic necessities, for the tiny sector, for the village and cottage industry sector, and for the small scale sector. But the path that has to be trod, in making available the capital and raw materials for these economically weak and unorganised sectors, in providing them with the training and managerial competence that they need, in ensuring market availabilities and the fruitful coexistence of the large and tiny sectors of production, is a long and hard one and has to be pursued by you relentlessly over a long period, if the people are to have access to these essential goods and services.

Economy : Employment

Another area in which the inventive capacities of your generation is looked forward to is the employment situation of the country. The employment situation that you will be inheriting is a rather special and unique one. First, there are the massive numbers of men and women workers who constitute our labour force amounting to 240 millions today, which, in a generation when you will be leading the country, will increase to some 400 million working men and women. These large numbers alone place our country's employment problem in a situation not comparable to any of the 140 member countries of the United Nations except China. This means there is little that you can learn from other countries as I have learnt to my cost, with regard to means of providing full time, gainful productive employment to the 240 million men and women today and the 400 million tomorrow. There will have to be a creative inventive quality in tackling this massive problem. Second it is less than 10 per cent of our labour force that is employed in what is called our organised sector. 24 million men and women out of the total of 240 million workers are employed in all the areas, widely defined, of the organised sector of the secondary and tertiary and primary industry - I include parts of the primary industry because plantation workers and those employed in government and cooperative farms and dairy unions are included in this work force. Out of 5 million young men and women who enter our labour force each year, only 4 50,000 are absorbed in our factories which come under the factory legislation. It is clear that the organised sector which is so much in the forefront of our national life through strikes, lock outs, gheraoes in the great national debate now under way on the Industrial Relations Bill, and in the periodic publication of how many million mandays we have lost each year - is a very small part of our employment imperative. It is to the so called unorganised sector that we have to turn with its key function of self employment and self reliance when dealing with our employment problem. Third, this minor role of the organised sector is further underlined when taking into account the slow and almost declining rate at which employment opportunities are increasing in that sector. This year's Economic Survey presented to Parliament records the appalling fact that over the last five years employment in the public sector increased by 25 lakh work opportunities, while it increased by only 25,000 workers in the private sector: that is the organised manufacturing sector - both public and private - created employment for less than 26 lakh young workers out of the 250 lakhs who entered the work force during that period. There is thus here an urgent need for your generation to look at our whole system of employment and employment generation along with the system of rewards to see how work can be generated for every one in both the unorganised sector and organised sector, while at the same time relating the rewards not only to a person's productivity but to his needs. Is it possible for you to devise a system where the maxim, from each according to his ability, to each according to his needs, can be turned into an employment, self employment and rewards policy, much as the Chinese communes have been trying to accomplish. There are elements of this in our Food for Work and the Educated Employment subsidy programmes that need to be deepened and generalised.

Economy : Education

Our education system is closely related to our economy, reflecting both its strength and weaknesses. Like the growing and increasingly productive primary sector, our primary education programme is in good

shape from the quantitative point of view. It has an enrolment of over 70 per cent of the 6—11 age group, and will attain its target of 100 per cent by the end of the current Plan. There is the serious problem of educational wastage-the drop outs, push outs, and left outs-at this stage, which is identical with the number of families and their children living below the poverty line. As the poverty of the people is lifted by your efforts and as the non formal learning system which is more adapted to our society takes root and grows, I believe qualitatively primary education will de satisfying learning experience to all. The second level has also been turned around and pointed in the right direction with the productive work at the school level and vocationalisation at its higher levels, on which a start is being made. This vocationalisation of secondary education is the key to both our employment problem, as it will be to our social and cultural claims. It is the key to our employment problem because it is there that the qualities of self help and self reliance leading to self employment are developed. It is part of our social and cultural ethos because it is there that our attitudesand values are developed and embedded—of sharing, caring, of tolerance, truth and team work. Here I must appeal to you to see that there is no deflection from this vocationalisation imperative in the genaralised form of socially useful productive work which has become part of our curriculum in the school or in the vocationalised streams in our higher secondary institutions, by whatever name we call them, junior colleges, pre-university courses or higher secondary schools. It is in higher education that we face a real crisis today and it is a sad legacy that my generation is leaving behind for you in this regard. The double function of the university and college are the pursuit and diffusion of knowledge and service of the community. I believe that a large number of students and teachers, colleges and universities are pursuing these objectives in a quiet and effective manner. They do not become news, but they are in danger of becoming an isolated academic island. On the other hand, there are a large number of students and teachers, universities and colleges where the basic function of learning has broken down, in favour of strikes and demonstration, violence and counter violence, mass copying and corrupt practices in student admissions and teaching appointments. In the frustrating ethos of growing educated unemployment, (the registered educated job seekers in our employment exchanges have passed the 6 million mark today) the basic question that students are asking is, learning for what? In the growing uncertainty of employment conditions and the corrupt practices that accompany much employment, teachers are leaving behind their academic vocation and taking to the streets to ventilate their grievances. In my view it is not our education system as a whole, but our university and college system which is in serious trouble. As I have earlier pointed out, our primary and secondary education programmes are doing well and pointed in the right direction. Hence in relation to the particular stage which the development of our economy has reached and in relation to its future perspectives, I have the following short term and long term suggestions to make with regard to higher education which faces the crisis.

First we must remind ourselves that we in the universities and colleges in this poor country of ours are a privileged sector. No sector in our country has our kind of buildings, our books and equipment, our leisure, our opportunities to think, to reason together and learn up to the highest levels of excellence and live a protected life — protected from hunger

and starvation. politicial ups and downs and intellectual and cultural isolation. In monetary terms, society — government and private agencies — have invested a huge Rs. 3,000 crores in capital costs and Rs. 500 crores per annum in recurring costs in higher education. This we must in some fashion return to society in the form of teaching and learning, which is our special and unique responsibility. There can be no excuse for any negligence on this, because we are dealing here with a simple and elemental matter of quid proquo as well of fhe future of ourselves and our society. Second, I believe that the various reforms in updating of syllabi, relating our class room learning to helping to solve the appropriate problems in our villages and urban slums, the use of the semesters system of learning, the reform of the examination system through the gradual replacing of the external examination by a system of continuous internal assessment and its many components and developing the cultural and sports facets of college and university life, all suggested by the University Grants Commission, should be put into effect by the teacher, students and managements of all our colleges and universities. Third, the short term programme to provide every educated graduate who has not found employment within 1 year with a monthly stipend to enable him to continue his search for employment and eqiup himself for self employment that is being attempted by 3 of our state governments should now be generalised all over the country. Fourth, even without the Educational Institutions and Hospitals Bill now before Parliament, every university and college should establish and adhere to a code of conduct in the appointment and conditions of service of its teaching and nonteaching staff. These four measures are short term actions that can and must be taken now to save our system of higher education. To you of the coming generation I wonld like to address two further measures. The first is that the system of higher learning and research in our universities and colleges should result in a record for each student and professor of what he has attempted in learning and research and what he has accomplished and has yet to accomplish. Learning has no terminal point: it is life long : and that is what our certification and degrees must record. It must be first a factual and secondarily evaluative record of the learning outcome of each student. This means that there will be no unacademic classification into first class or second class or third class. No gradings into O A B C D & E. There will be no high priests called those who have passed, and no outcastes dubbed as those who have failed. This kind of classification is not the function of education. It is the function of the employment market, and so let the prospective employer interpret the learning record which each student will have, let the employer have his selection tests and competitive exams, as the medical and engineering institutions will have to regulate their admission. It is no part of the university and college to serve the employment market in the inequitable way that it is now being forced to serve it, when as we know, it is not those with good degrees but only the sons and daughters of those who have influence, status, political and economic power and caste and community affiliations are picked up by the market. The inequitable link between university certification and gainful employment, which is in any case an eye wash as I have just pointed out, needs to be broken. Second, I believe there is need to make the access to higher education really and truly open and the system itself a recurrent one. That is, after secondary school, a student should

be free to go into the employment market and return later to higher education, with the same social and academic standing and status as one who goes straight on from secondary school to university. The University entrance qualification would then be equally the secondary school completion or a period of full time employment. Under this system, higher education completion will not be the monopoly privilege of the top 20 per cent of society as it is today. It will be open to all to come and go, when needed and where convenient, it will be equitable as there will be no handicap on the poor who have to earn before they further learn, it will ensure servicing of the truly gifted, it will be enriching because learning will be pursued freely and without economic compulsions.

And now I come back to the point from which I started : to this auspicious milestone in your life, this Convocation Day of the Osmania University when you have completed one phase of learning and are the proud possessors of the honour and distinction which learning confers on all its devotees. May you be blessed in all your future undertakings for yourself, for your families and friends, and for your society and country ! May you bless all that you touch and feel and serve in your life and in society which awaits you and needs you. My blessings on all of you.

Ninth Interdisciplinary Research Methodology Workshop for Southern Universities

(Under the joint auspices of the MIDS and ICSSR Southern Regional Centre, Hyderabad)

Statement of the Workshop

The 9th Interdisciplinary Research Methodology Workshop on "Caste and Class in India's Rural Society" held at Cochin (from June 9-12, 1979) was attended by seventeen participants representing eight South Indian Universities and the disciplines of anthropology, economics, geography, law, philosophy, public administration and sociology. It was a follow-up of the seventh and eighth workshops which had "Village Studies" as their theme. The necessity for this workshop arose from the recognition that caste and class are the two major factors in understanding India's rural society.

The following central issues emerged in the course of discussion:

1. What transformation is taking place in in the caste phenomenon? What new characteristics is caste acquiring in the new set up? Which of the traditionally known attributes are losing ground in the present circumstances? (For example: untouchability and total ban on inter-caste dining are becoming less significant; endogamy and ritual hierarchy continue to be of vital importance, and, the solidarity of castes beyond a region, particularly to have a better bargaining position in power politics in the modern democratic set-up of our country, is a novel attribute gaining ground).

2. The oppression and discrimination which have been associated with caste and which have lain heavily on the members of the lower castes are all too well known and ought to have no place in a democratic society.

A question was raised as to what will provide a sense of security and belonging, which caste has traditionally given to its members if caste disappears. In response, one point of view was that from the standpoint of the oppressed classes who form a large majority, security does not occupy an important place. The greater need is for removing caste disabilities completely: this is possible only when caste disappears.

3. The social scientists participating in the workshop conceptualised caste differently. Differences arose in regard to what constitute the necessary and sufficient conditions for understanding caste as a social phenomenon. The participants also differed in their evaluation of the historical processes relating to the origin and transformation of the caste system.

The point was made that each conceptual model gave rise to certain methodological implications which, in turn, influenced field studies conducted in the framework of caste. It was felt that the issue would still remain: which conceptual model and the methodological implications following from it is most suitable for the study of caste system?

4. One suggestion made was that the Indian rural society must be understood primarily in terms of the class category, and caste can, at best, be taken as an epiphenomenon.

The opposite view was that in India caste is the primary factor in the rural setting and class is an analytical category superimposed upon it.

5. Discussion between scholars belonging to different disciplines bringout again

and again the limits of a specific approach in grasping social reality/universe of social discourse. A discipline committed to a particular methodological approach to grasp certain aspects of reality does so by abstraction and selection which necessitate emphasizing certain aspects and leaving certain others. This specific disciplinary point of view determines its explanatory power for both comprehending and changing a system.

The discussion on caste and class in rural India brought this out in sharp focus. Diametrically different views emerged from perspectives of anthropology, on the one hand, and economics, on the other.

ANTHROPOLOGY is concerned with understanding concretely and vividly the sociocultural life of a people holistically. The anthropologist has to concentrate on a microcosm in his detailed empirical investigation though he does not rule out the possibility of illumining a much bigger macrocosm in the light of his concrete experiences acquired through the disciplinary field work investigation. The stress on the concrete and detailed study of a people in a specified setting and with reference to the context makes the anthropologist vividly aware of the immense complexity of the actual social situation. He is aware that neither he nor anyone else can be sure of the consequence of induced change in a specific segment of the society. This deters him from being too eager to predict and to suggest measures which are sure to bring about desired change.

ECONOMICS operates at a different level of abstraction and deals with a different universe of discourse. The economist's conceptual schema readily comprehends macro phenomena. The models he builds to comprehend economic relations are designed so as to measure and enable him to predict what consequences would follow if certain courses of action are taken. In recent decades, economists, in spite of differences of opinion amongst them, have come to accept the view that change is necessary and that they can play an active role in bringing about desirable change.

6. The workshop came to a conclusion with an earnest appeal to the social scientists to grasp the limits of rationality in-bulit in the manner a discipline conceptualises and studies reality. Disciplines also differ in their levels of abstraction, conceptual apparatus and methodological tools used. The participants realized the need to transcend the boundary of their specific discipline for a more adequate and all-round grasp of the social phenomena in a dynamic setting.

But, this appeal for transcending the boundaries of particular social science disciplines should not mask the differences which exist in respect of the commitment of scholars to action.

(A) A group of social scientists realizes the immense complexity of social phenomena. These scientists' experience with holistic studies of different kinds of people in their sociocultural settings has a sobering effect on them. They are not very keen to predict because they cannot be too sure which direction the change would take if a certain strategy is deployed or innovation is introduced. These scholars may not deny the need for change but they are not very eager to commit themselves to a particular course of action as the only desirable mode of bringing about change.

(B) The other group of social scientists would regard commitment to action and participation in it as an integral part of understanding social reality.